PANA-12446

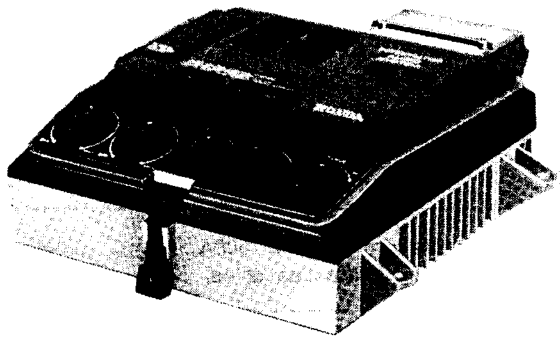
ORDER NO. GAD8712174C1
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Service Manual

INTEGRATED AUDIO SYSTEM
CUSTOM-MADE FOR HONDA

RM-1500A

Area
[M] ......For U.S.A.



RM-1500A MECHANISM SERIES

■ SPECIFICATIONS

General:

Power Source:	DC;12V(Negative Ground only)
Test Voltage:	DC;14V
Power Consumption:	8A at maximum power output (Memory back-up 1mA)
Power Output:	Head set: 1W (8Ω/ch) Main amp: 24W (3Ω/ch)
Dimensions:	101.6"(W)×34.4"(H)×124"(D) (258x87.5x315)mm
Weight:	5lb 7oz (2.56kg) without bracket

FM Tuner Section:

Frequency Range:	FM;87.5~107.9MHz
Usable Sensitivity:	10dB(S/N 30dB)
Signal to Noise Ratio:	55dB
Stereo Separation:	35dB at 1kHz
THD:	0.5%
IF Frequency:	10.7MHz

AM Tuner Section:

Frequency Range:	AM;530~1620kHz
Usable Sensitivity:	30dB (S/N 20dB)
Selectivity:	50dB(±10kHz)
IF Frequency:	450kHz

Cassette Deck Section:

Tape System:	Auto-reverse
Stereo Separation:	35dB at 1kHz
Track System:	4-track 2 channel stereo playback

Intercom Section:

Mic Input Impedance:	200Ω
Head set Output:	1W(8Ω/ch)

AF Section:

Auto volume level: +8 ~ +16dB
Tone volume level: +8 ~ -8dB

Weights and dimensions shown are approximate.
Design and specifications are subject to change without notice.

Matsushita Services Company
50 Meadowland Parkway,
Secaucus, New Jersey 07094

Panasonic Hawaii, Inc.
91-238, Kauhi St. Ewa Beach
P.O. Box 774
Honolulu, Hawaii 96808-0774

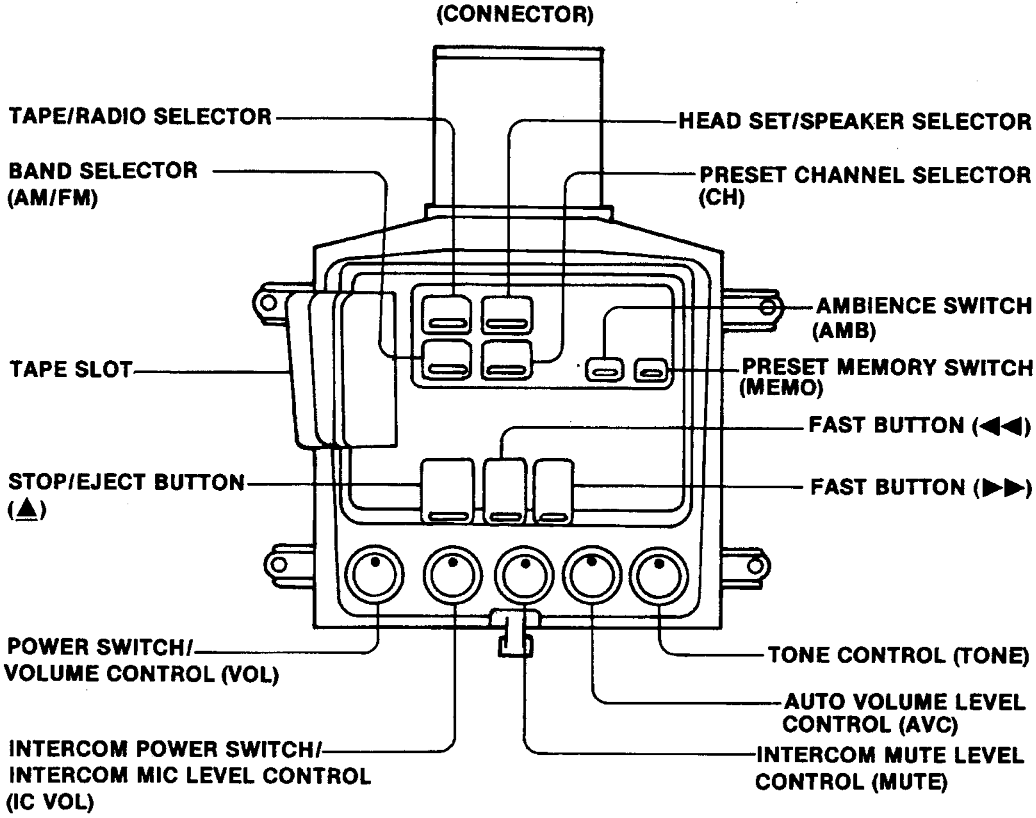
Panasonic Sales Company, Division of Matsushita Electric of Puerto Rico, Inc.
Ave. 65 De Infanteria, Km.9.7
Victoria Industrial Park
Carolina, Puerto Rico 00630

HONDA/Panasonic

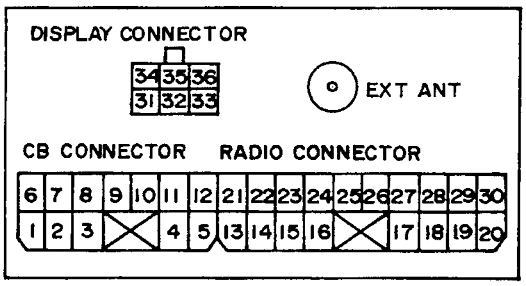
CONTENTS

This service manual is only applicable to model RM-1500A.
It is imapplicable to optional equipment and accessories.

LOCATION OF CONTROLS AND COMPONENTS



< CONNECTOR >



■ CB CONNECTOR

1. NOT USED
2. CB AF HS
3. CB AF SP
4. NOT USED
5. NOT USED
6. CB ON
7. CB AF E
8. HS/SP
9. CB AUDIO MUTE
10. GND OUT
11. CB MIC OUT
12. CB MIC E

■ RADIO CONNECTOR

13. MIC PA
14. MIC E PA
15. HS OUT E
16. HS OUT L
17. FR SP ⊖
18. FR SP ⊕
19. SPEED PULSE
20. ACC
21. MIC DR
22. MIC E DR
23. HS OUT R
24. GND
25. FL SP ⊕
26. FL SP ⊖
27. TUNE DN
28. MUTE
29. TUNE UP
30. BACK UP

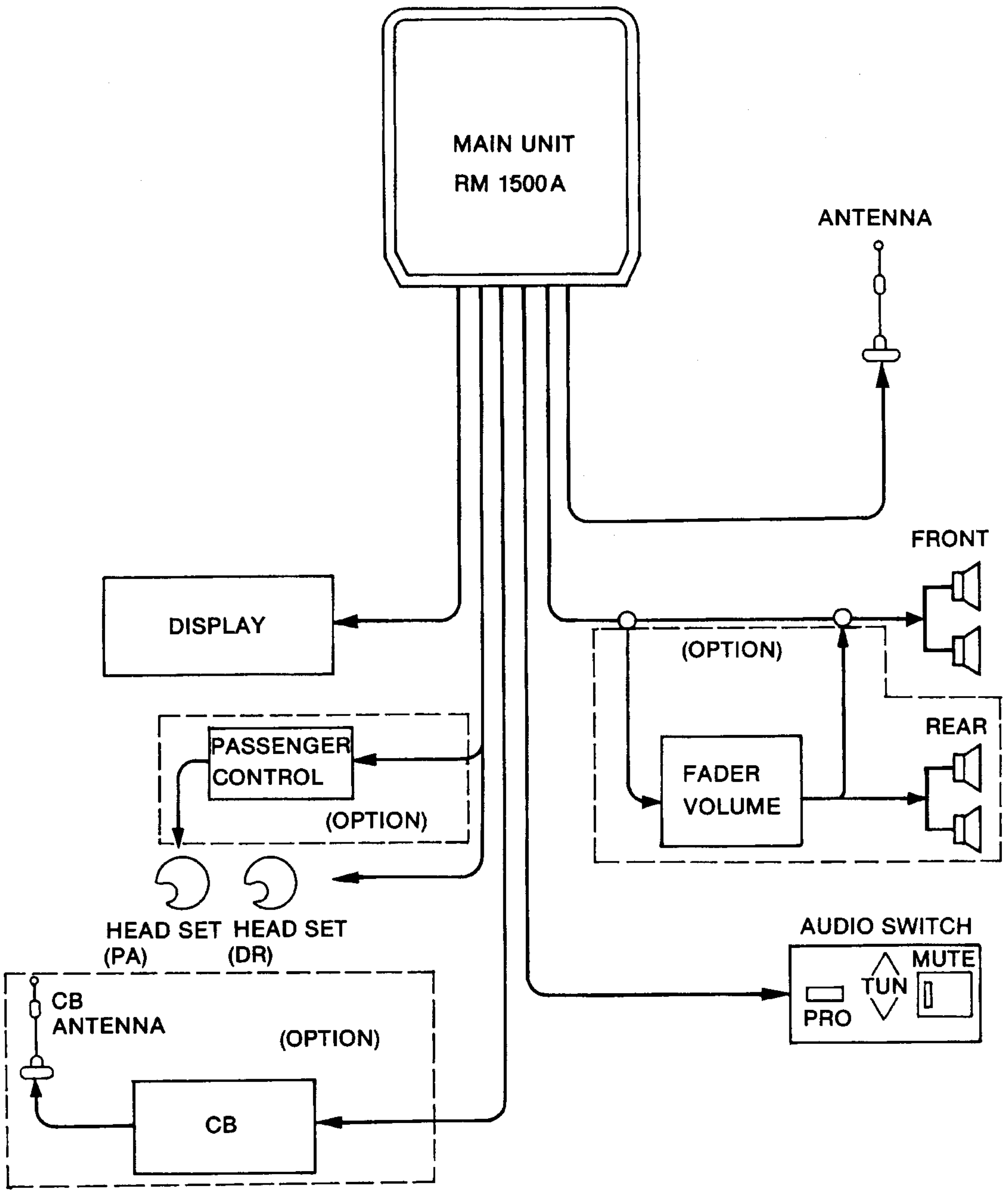
■ DISPLAY CONNECTOR

31. DATA
32. GND
33. BK
34. CLOCK
35. LOAD
36. K-MUTE

OPTION

CB Transceiver, CB Antenna, Head Set, Passenger Controler, Fader Volume, Rear Speaker.

AUDIO SYSTEM CONNECTION



DISASSEMBLY INSTRUCTIONS

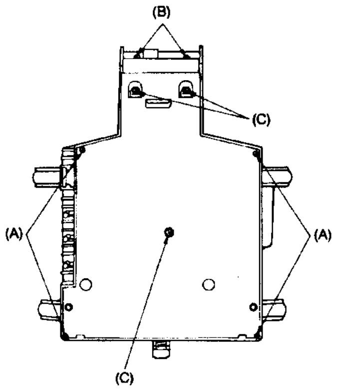


Fig. 1

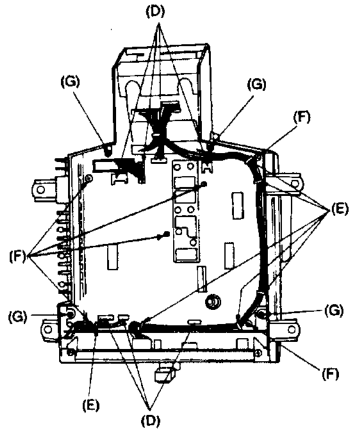


Fig. 2

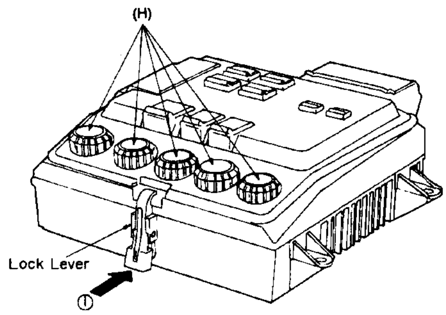


Fig. 3

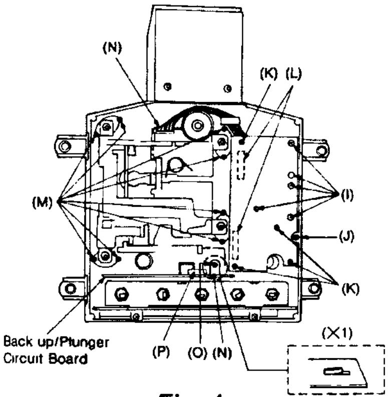


Fig. 4

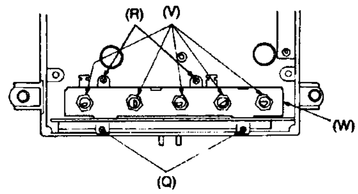


Fig. 5

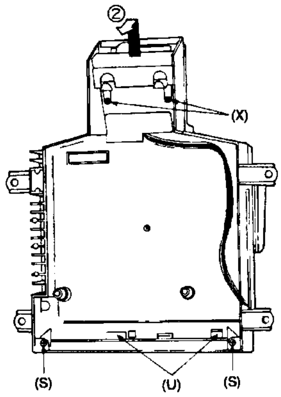


Fig. 6

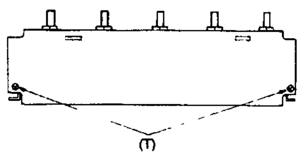


Fig. 7

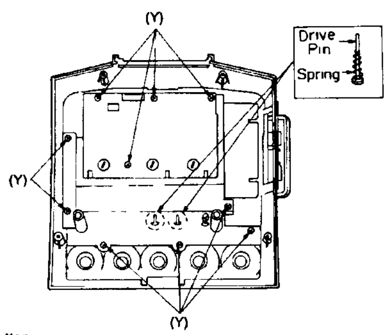


Fig. 8

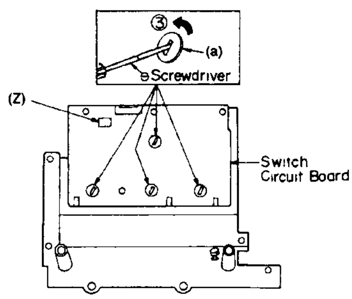


Fig. 9

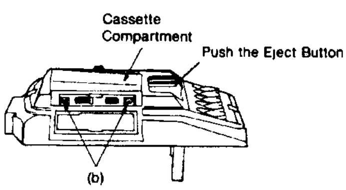
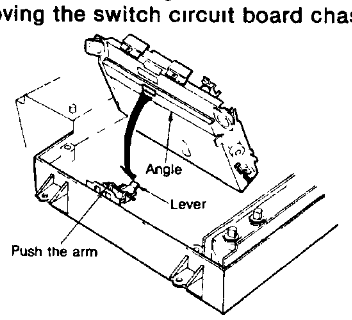


Fig. 10

Steps	Shown in Fig —	To remove —	Remove —
1	1	Bottom Cover	Screw (3×8)mm (A)×4
2			Screw (3×12)mm (B)×2
3			Screw (3×6)mm (C)×3
4	2	Main Circuit Board	Socket (CN101, CN102, CN103, CN104, CN105, CN106, CN107) (D)×7
5			Cut the wire tie (E)×6
6			Screw (3×12)mm (F)×6
7	2	Upper Cabinet Ass'y	Screw (3×10)mm (G)×4
8	3		Knob (H)×5
9			Push the lock lever in the direction of arrow ①
10	4	Power Amp Circuit Board	Screw (3×12)mm (I)×5
11			Screw (J)×1
12			Screw (3×8)mm (K)×4
13			Socket (CN409, CN410) (L)×2
14	4	Mechanism Unit	Screw (M)×8
15			Socket (CN617, CN801) (N)×2
16	4	Back up/Plunger Circuit Board (※1)	Screw (O)×1
17			Socket (CN618) (P)×1
18	5	Volume Circuit Board	Screw (3×8)mm (Q)×2
19			Screw (R)×2
20	6		Screw (3×8)mm (S)×2
21	7		Screw (T)×2
22	6		Socket (CN308, CN313) (U)×2
23	5		Nut (V)×5
24			Angle (W)×1
25	6	Power Supply Circuit Board	Screw (3×6)mm (X)×2
26			Remove the power supply circuit boad in the direction of arrow ②
27	8	Switch Circuit Board Chassis (※2)	Screw (3×10)mm (Y)×10
28	9	Switch Circuit Board	Socket (CN702) (Z)×1
29			Lamp (a)×4 To remove the lamp, use a standard screwdriver and turn in the direction of arrow ③
30	10	Cassette Compartment	Push the eject button
31			Screw (3×10)mm (b)×2

(※1) One of the lugs is bent, so after removing the screw (M), remove the circuit board while turning it to accommodate the angle of the lug

(※2) When removing the switch circuit board chassis, the drive pin and spring may come off, so be careful not to lose them.



Mechanism attachment

(1) Push the arm to raise the lever
(2) Attach the mechanism by inserting the lever into the mechanism at the shown angle

▼ Be sure to fold at the (▼) mark so that the mark is on the outside

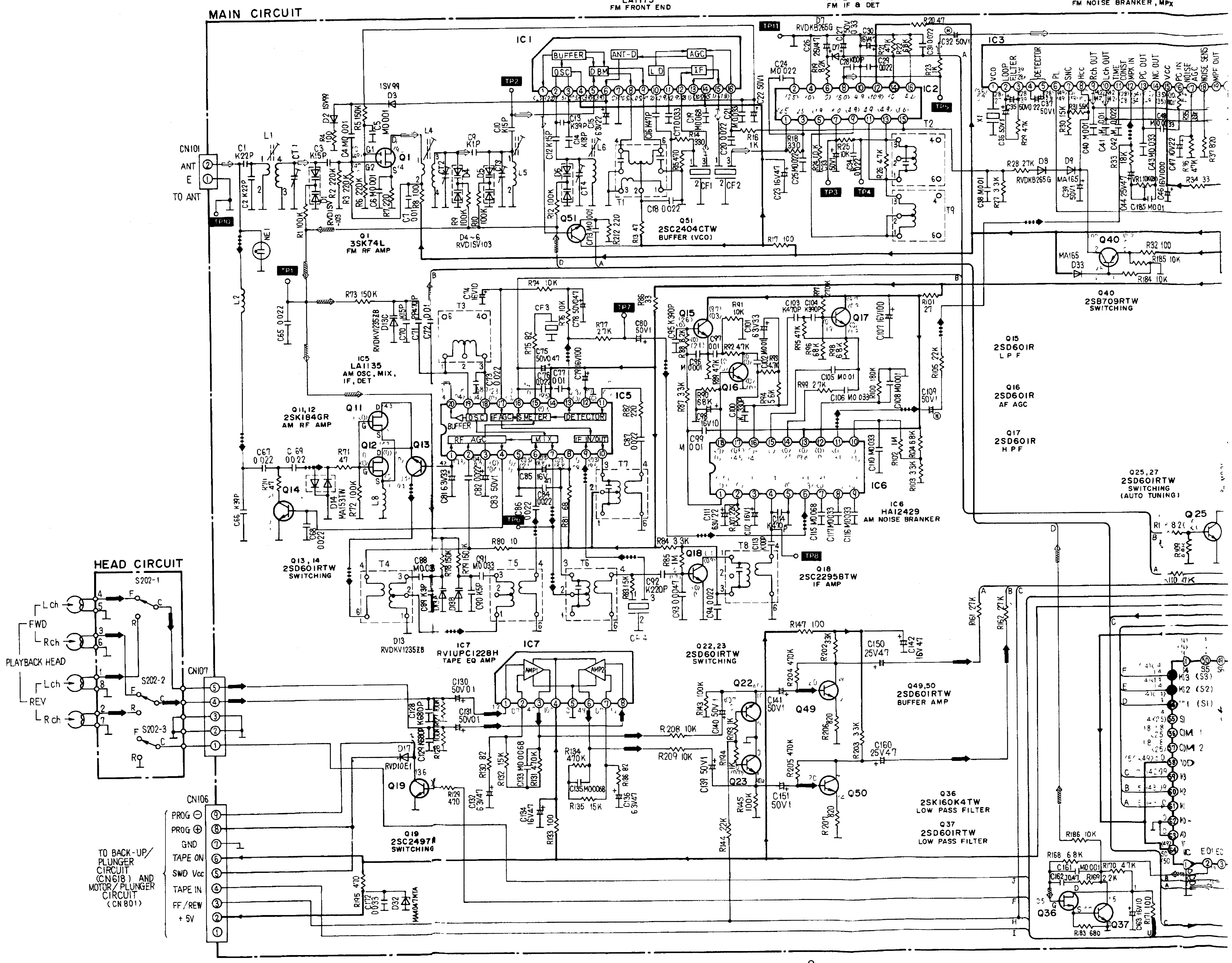
SCHEMATIC DIAGRAM (MAIN)

Notes

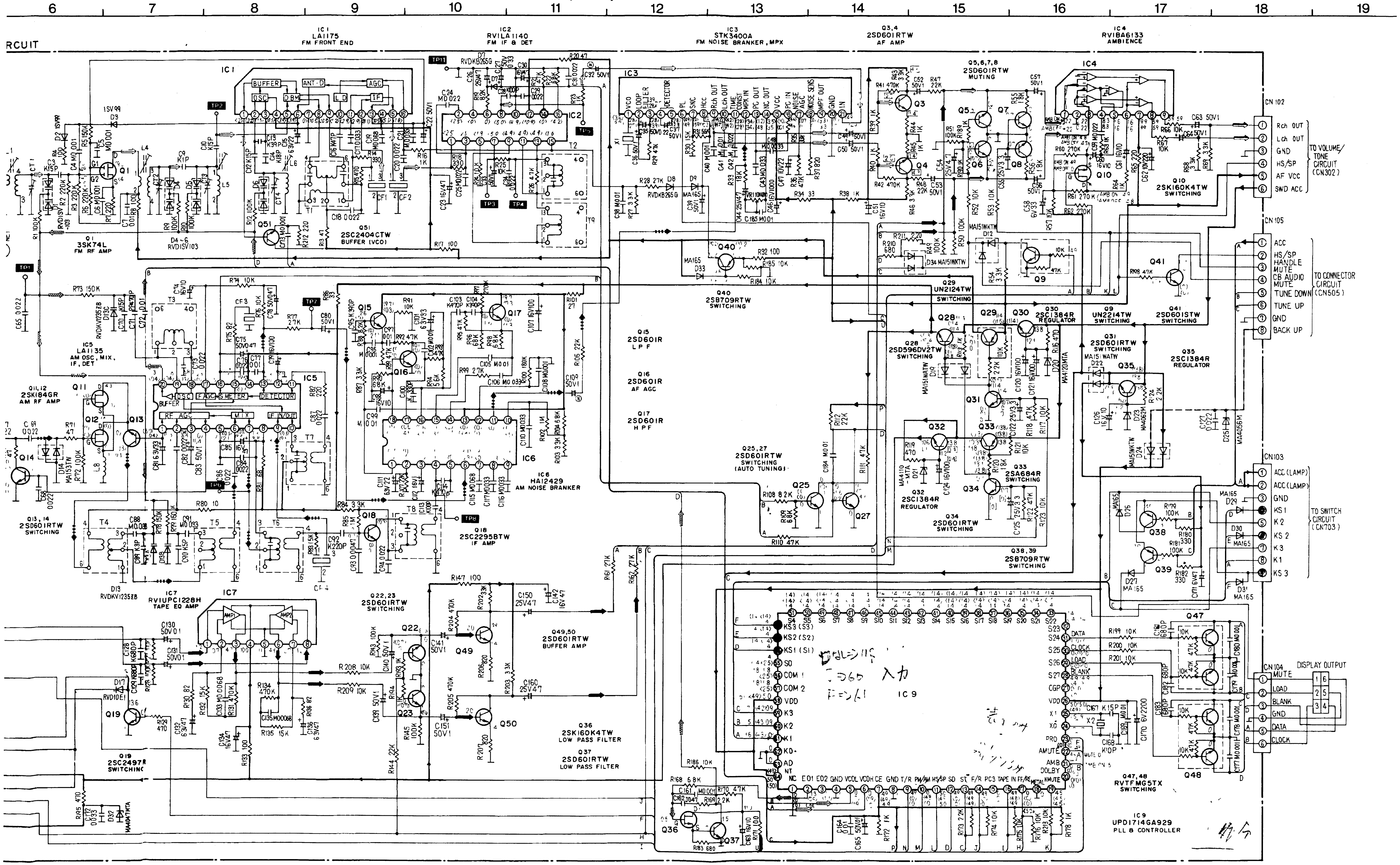
1 S202 1~S202-3 Head switch in "FWD" position (F FWD, R REV)
2 VR1 FM VCO adjustment VR
3 DC voltage measurement are taken with electronics voltmeter from negative terminal of battery
No mark Playback position, < > FM ( ) AM [ ] RADIO
<< >> FF/REW

4 The mark (■) shows test point, e g TP1 = test point 1
5 The supply parts number is described alone in the replacement parts list
• **This schematic diagram may be modified at any time with the development of new technology**

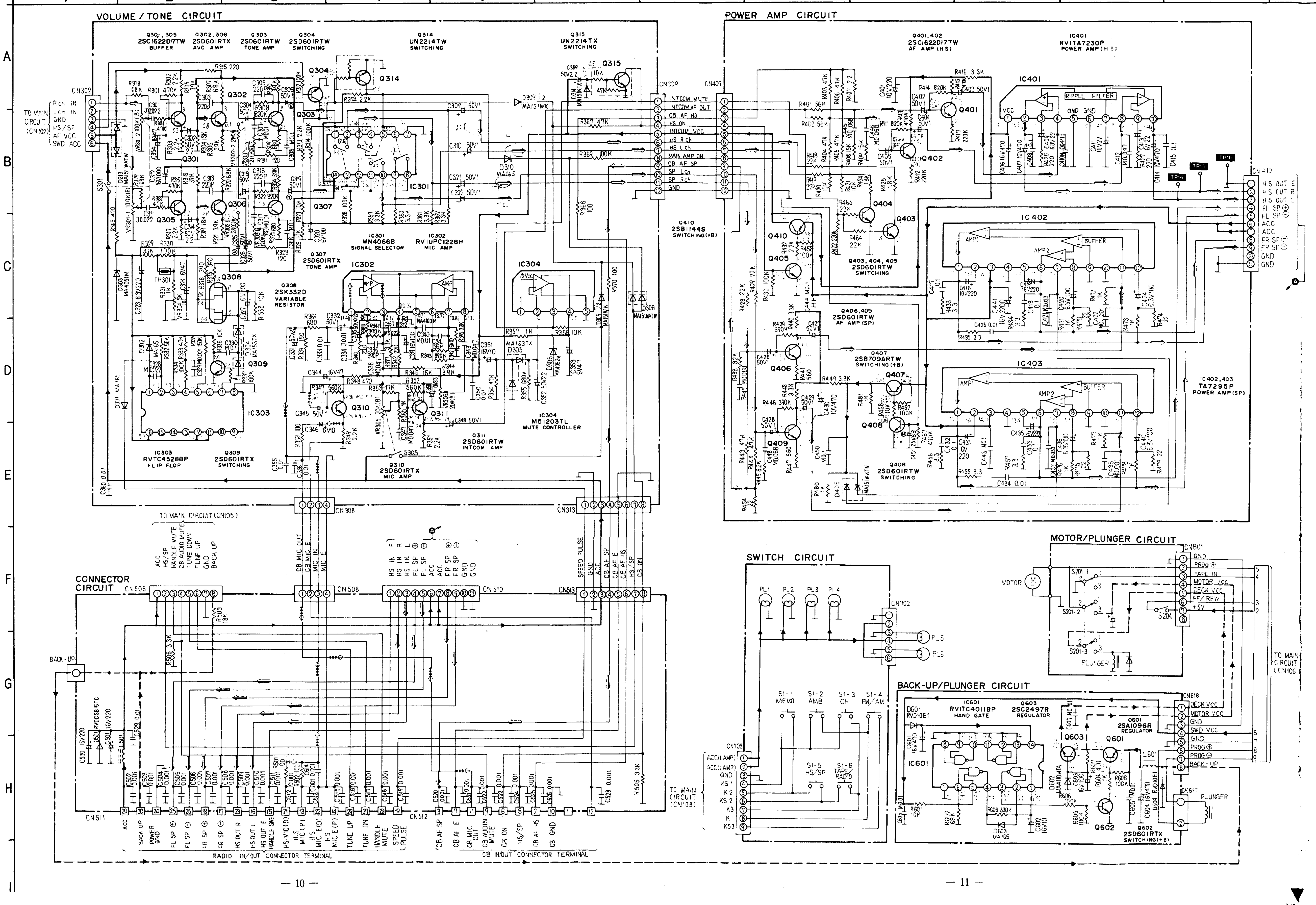
- Radio (FM) Signal Line
- Radio (AM) Signal Line
- Tape (PLAY) Signal Line
- Tape/Radio Signal Line
- +B Voltage Line
- FM VCO Signal Line
- AM VCO Signal Line
- FM/AM VCO Signal Line
- MIC Signal Line
- +B (BACK UP) Signal Line



SCHEMATIC DIAGRAM (MAIN)



SCHEMATIC DIAGRAM (VOLUME/TONE, POWER, CONNECTOR, SWITCH, MOTOR/PLUNGER, BACK-UP/PLUNGER)

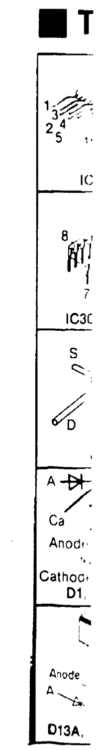


Notes:

1. S1-1~S1-6
   S1-1: Memory
   S1-2: Ambienc
   S1-3: Channel
   S1-4: FM/AM
   S1-5: Head set
   S1-6: Tape/rad
2. S201-1~S201-3 : FWD/REV
3. S204 : Mute sw
4. S301 : Power sw
5. S305 : Intercom
6. VR301-1, VR301-2 : Volume c
7. VR302-1, VR302-2 : Auto volu
8. VR303-1, VR303-2 : Tone con
9. VR304 : AVC gain
10. VR305 : Intercom
11. VR306 : Mute leve
12. DC voltage measurement is ta voltmeter from negative termin
    No mark...Playback position
    [ ]...RADIO.
    [ ]...Speaker, (( ))...Head
    [[ ]]...Intercom switch: OFF
13. The mark (▬) shows test po
14. The supply parts number is des parts list.

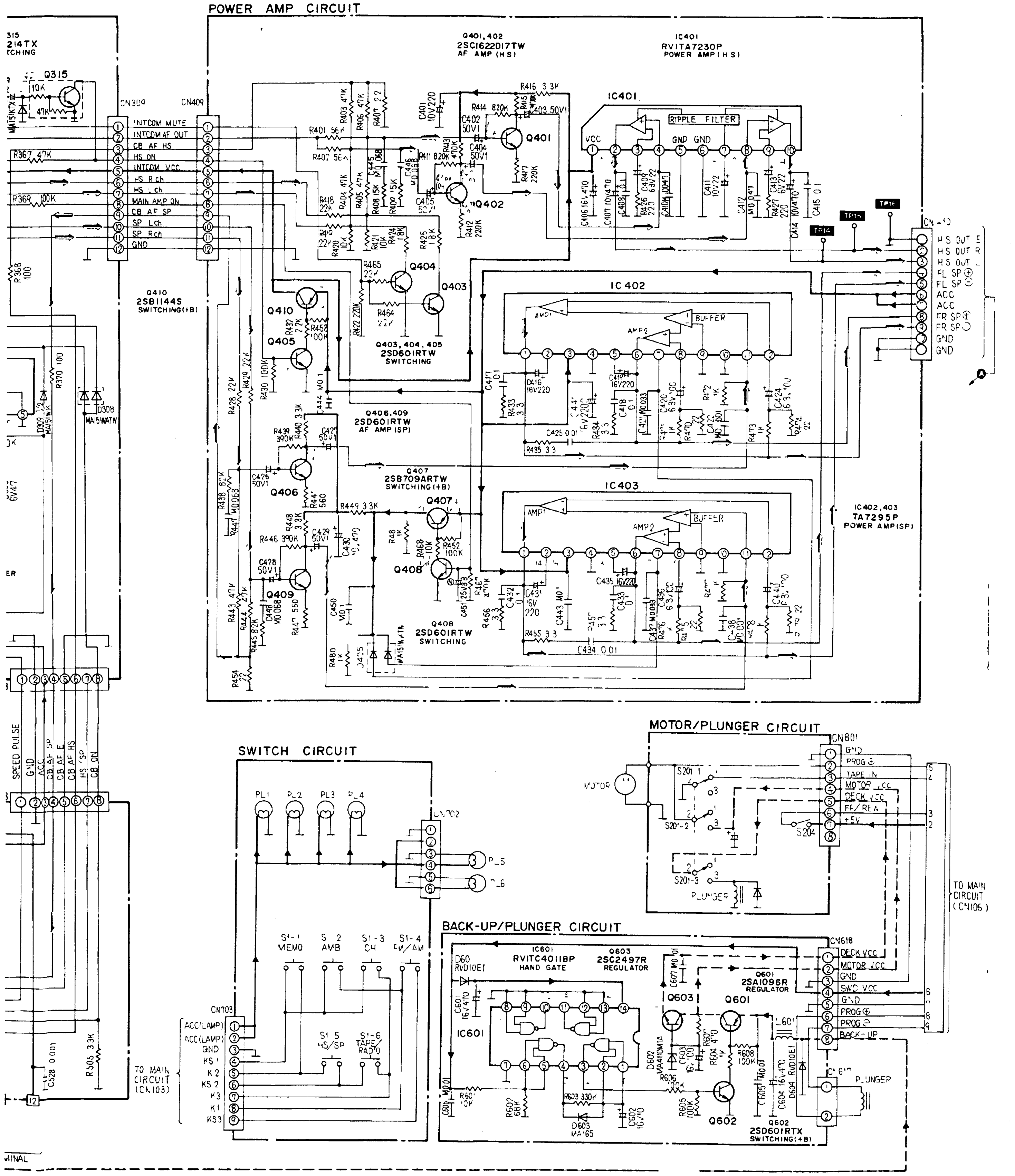
- **This schematic diagram may be development of new technology.**

Radio (FM) Signal Line
Radio (AM) Signal Line
Tape (PLAY) Signal Line
Tape/Radio Signal Line
+B Voltage Line
FM VCO Signal Line
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FM/AM VCO Signal Line
MIC Signal Line
+B (BACK UP) Signal Li



IATIC DIAGRAM (VOLUME/TONE, POWER, CONNECTOR, SWITCH, MOTOR/PLUNGER, BACK-UP/PLUNGER)

6 7 8 9 10 11 12 13 14 15 16 17 18 19



Notes

1 S1 1~S1-6
- S1-1 Memory switch
- S1-2 Ambience ON/OFF switch in "OFF" position
- S1-3 Channel select switch
- S1-4 FM/AM select switch
- S1-5 Head set/speaker select switch
- S1-6 Tape/radio select switch

2 S201 1~S201 3 ~~FWD/REV select switch~~ Cassette in switch
3 S204 Mute switch -F/REW switch)
4 S301 Power switch
5 S305 Intercom ON/OFF switch
6 VR301 1, VR301-2 Volume control VR
7 VR302 1, VR302-2 Auto volume level control VR
8 VR303-1, VR303-2 Tone control VR
9 VR304 AVC gain adjustment VR
10 VR305 Intercom mic level control VR
11 VR306 Mute level control VR
12 DC voltage measurement is taken with an electronics voltmeter from negative terminal of battery
No mark Playback position
[box] RADIO
[ ] Speaker, (( )) Head Set
[[ ]] Intercom switch OFF

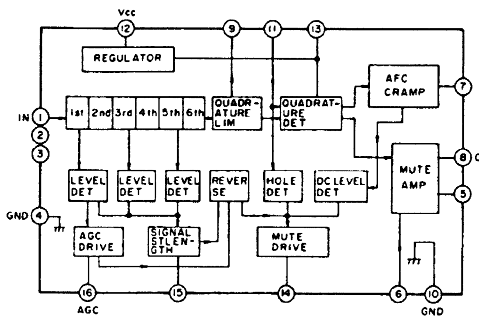
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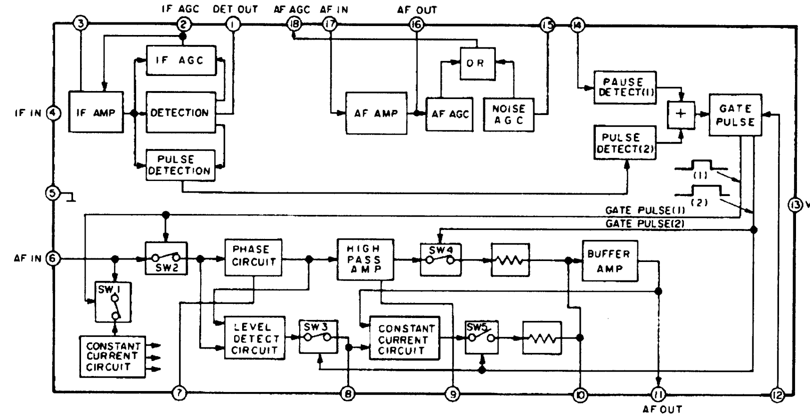
Radio (FM) Signal Line
Radio (AM) Signal Line
Tape (PLAY) Signal Line
Tape/Radio Signal Line
+B Voltage Line
FM VCO Signal Line
AM VCO Signal Line
FM/AM VCO Signal Line
MIC Signal Line
+B (BACK UP) Signal Line

IC BLOCK DIAGRAM

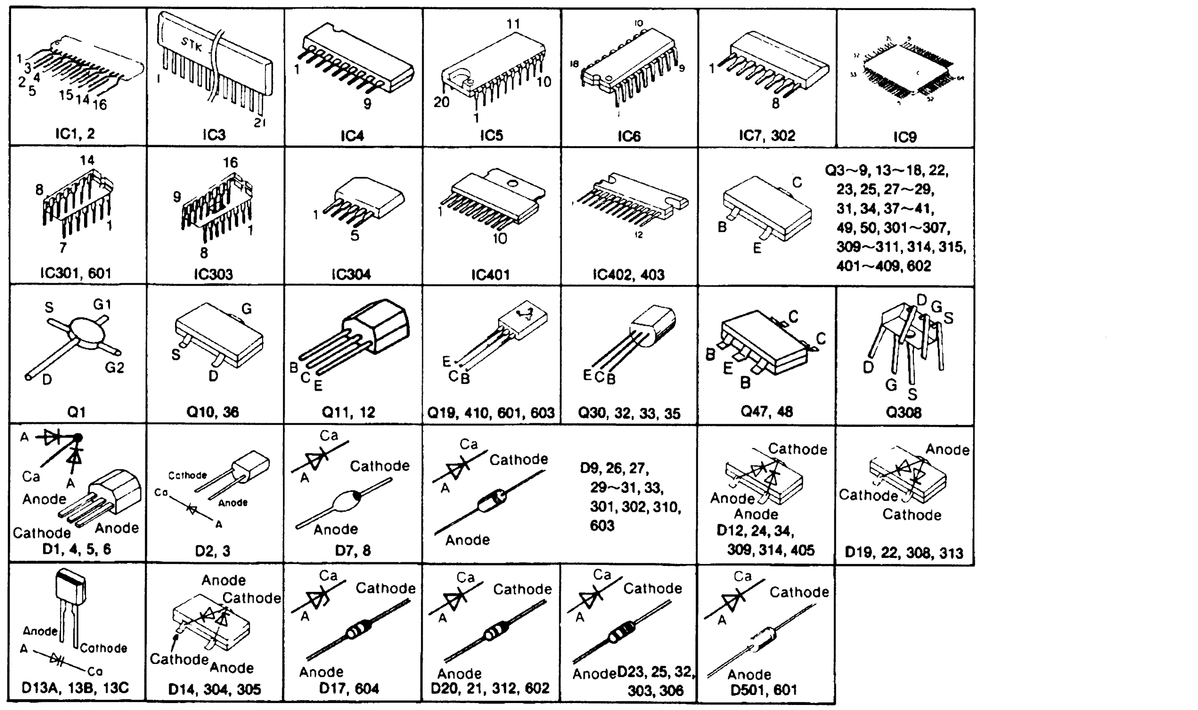
IC2 RVILA1140



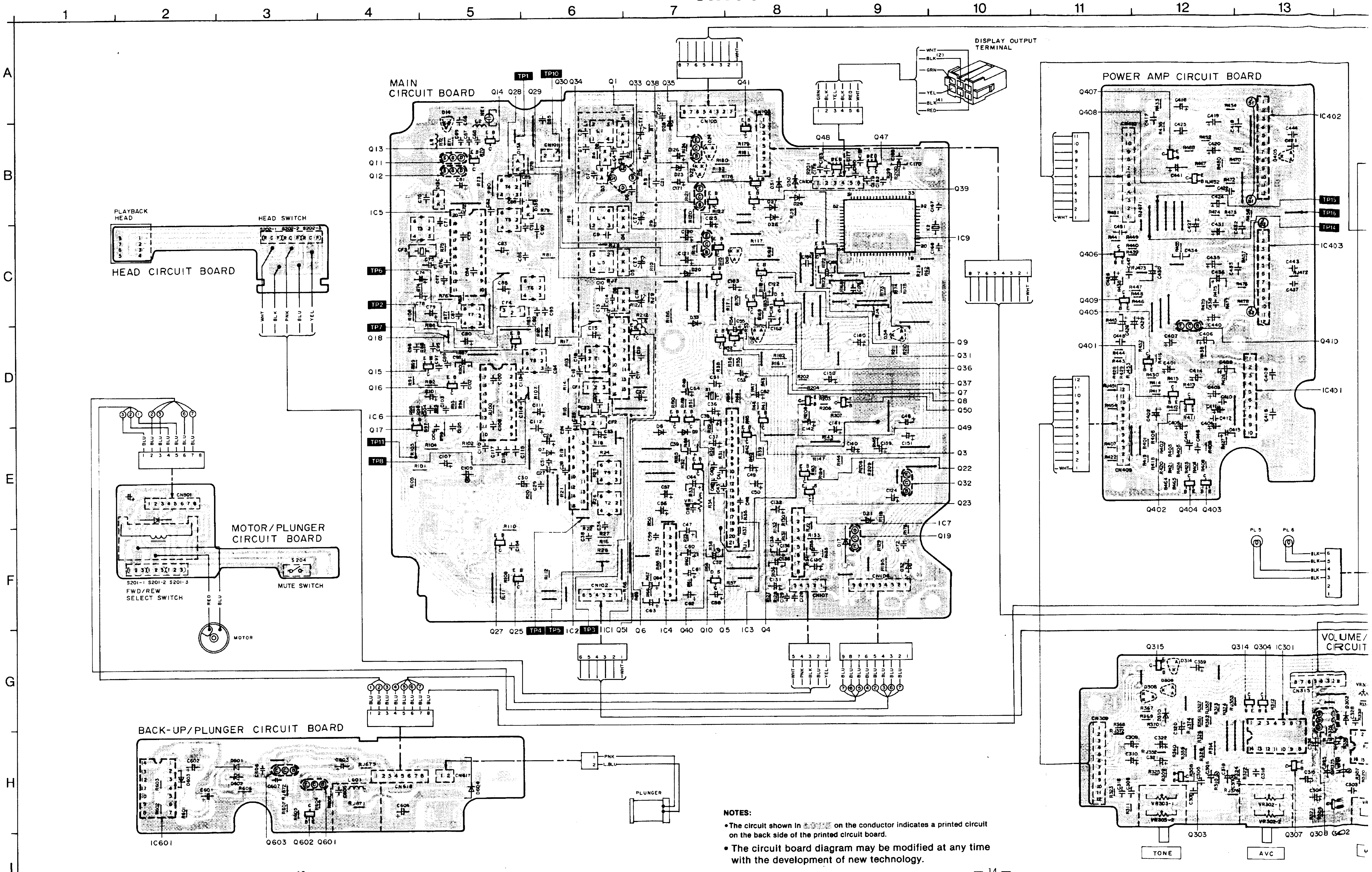
IC6 HA12429



TERMINALS



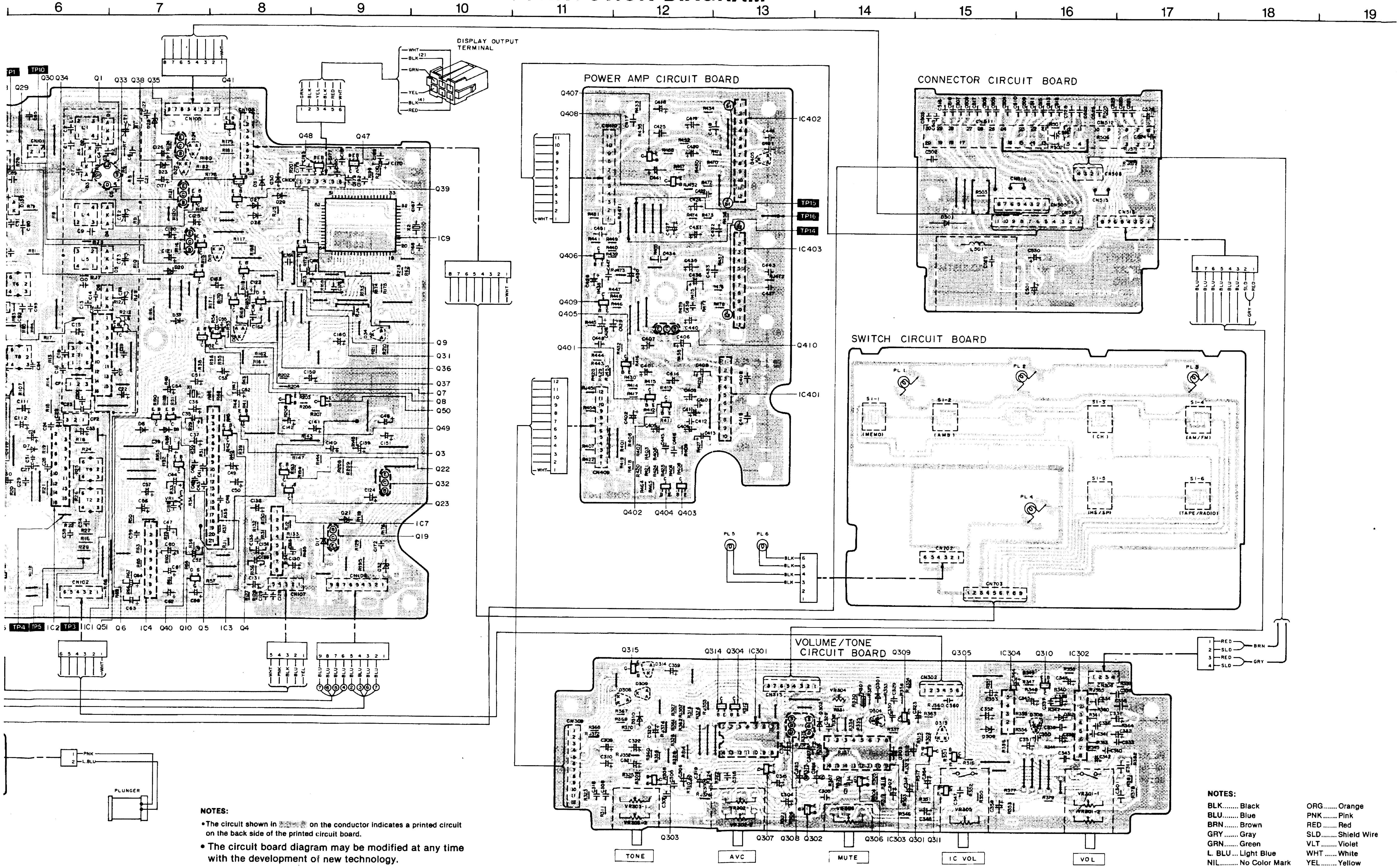
CIRCUIT BOARD AND WIRING CONNECTION DIAGRAM



NOTES:

- The circuit shown in ▒▒▒ on the conductor indicates a printed circuit on the back side of the printed circuit board.
- The circuit board diagram may be modified at any time with the development of new technology.

CIRCUIT BOARD AND WIRING CONNECTION DIAGRAM



NOTES:

- The circuit shown in ▒ on the conductor indicates a printed circuit on the back side of the printed circuit board.
- The circuit board diagram may be modified at any time with the development of new technology.

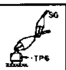
NOTES:

BLK	Black	ORG	Orange
BLU	Blue	PNK	Pink
BRN	Brown	RED	Red
GRY	Gray	SLD	Shield Wire
GRN	Green	VLT	Violet
L. BLU	Light Blue	WHT	White
NIL	No Color Mark	YEL	Yellow

MEASUREMENTS AND ADJUSTMENTS

1. Set tone control to center.
2. Inter com VOL and MUTE control to center.
3. AVC control to center.
4. Set volume control to maximum.
5. Set band switch to AM, FM.
6. Set HS/SP select switch to SP.
7. Set ambience switch to OFF.
8. Set power source voltage to 14V DC.

■ AM IF ALIGNMENT

	BAND	SIGNAL GENERATOR or SWEEP GENERATOR: CONNECTIONS	SIGNAL GENERATOR or SWEEP GENERATOR: FREQUENCY	FREQUENCY DISPLAY SETTING	INDICATOR (ELECTRONICS VOLTMETER or SCOPE)	ADJUSTMENT	REMARKS
	AM-IF ALIGNMENT						
(1)	AM	TP6 ...(+) TP10 ...(−) 	450 kHz 30% Mod. at 400 Hz	Point of non-interference. (or/ about 600 kHz)	[illegible] ...(+) TP10 ...(−)	T6 (AM 1st IFT) T7 (AM 2nd IFT)	Adjust for maximum output.

■ AM RF ALIGNMENT

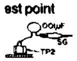
	BAND	AM SIGNAL GENERATOR: CONNECTIONS	AM SIGNAL GENERATOR: FREQUENCY	FREQUENCY DISPLAY SETTING	DC VOLTMETER	ADJUSTMENT	REMARKS
(1)	AM	Disconnect	No signal applied	530kHz (CH1)	TP1 ...(+) TP10 ...(−)	———	Adjust for 1.2±1.6V reading on DC voltmeter
(2)	AM	Disconnect	No signal applied	1620kHz (CH5)	TP1 ...(+) TP10 ...(−)	———	Adjust for 6.7±7.5V reading on DC voltmeter
(3)		Repeat steps (1) and (2).					

	BAND	AM SIGNAL GENERATOR: CONNECTIONS	AM SIGNAL GENERATOR: FREQUENCY	FREQUENCY DISPLAY SETTING	AC VOLT METER	ADJUSTMENT	REMARKS
(4)	AM	Connect to antenna socket through AM RF dummy antenna. (Refer to Fig. 2)	690kHz	600kHz (CH2)	TP1 ...(+) TP10 ...(−)	T4 (AM ANT 1st) T5 (AM ANT 2nd)	Adjust for maximum reading on AC voltmeter
(5)		Repeat steps (4) and (5).					

■ AM NB ALIGNMENT

BAND	AM SIGNAL GENERATOR: CONNECTIONS	AM SIGNAL GENERATOR: FREQUENCY	FREQUENCY DISPLAY SETTING	OSCILLO SCOPE	ADJUSTMENT	REMARKS
AM	Conne.. to antenna socket ...ugh AM RF du... antenna. (Refe... Fig. 2)	600kHz (400 Hz, 0% Mod. 74 dB)	600kHz	TP8 ...(+) TP11 ...(−)	T8 (AM NB)	Adjust for maximum wave on the oscilloscope.

■ FM ALIGNME

	BAND	...IGNAL GENERATOR or SWEEP GENERATOR: C... ...NECTIONS	FREQUENCY	FREQUENCY DISPLAY SETTING	INDICATOR (ELECTRONICS VOLTMETER or SCOPE)	ADJUSTMENT	REMARKS
	FM-IF ALIGNMENT						
(1)	FM	Hig... ...e thru. 0.0... ...to test poi... [illegible]. Negative sid... ...est point [illegible] 	10.7 MHz SWP.	Point of non-interference. (or/ about 90 MHz)	Connect vert. amp. of scope to test point [illegible]. Negative side to test point [illegible].	T1 (FM 1st IFT)	Adjust for maximum amplitude. (Refer to Fig. 4)
(2)	FM	"	"	"	"	T2 (FM 2nd IFT)	Adjust for maximum amplitude. (Refer to Fig. 5)

■ FM RF ALIGNMENT

	BAND	FM SIGNAL GENERATOR: CONNECTIONS	FM SIGNAL GENERATOR: FREQUENCY	FREQUENCY DISPLAY SETTING	DC VOLTMETER	ADJUSTMENT	REMARKS
(1)	FM	Disconnect	No signal applied	87.5MHz (CH1)	TP1 ...(+) TP10 ...(−)	L6 (FM OSC Coil)	Adjust for 1.0±0.05V reading on DC voltmeter.
(2)	FM	Disconnect	No signal applied	107.9MHz (CH5)	[illegible] ...(+) TP10 ...(−)	CT4 (FM OSC Trimmer)	Adjust for 8±0.1 V reading on DC voltmeter.
(3)		Repeat steps (1) and (2).					

	BAND	FM SIGNAL GENERATOR: CONNECTIONS	FM SIGNAL GENERATOR: FREQUENCY	FREQUENCY DISPLAY SETTING	AC VOLTMETER	ADJUSTMENT	REMARKS
(4)	FM	Antenna socket (FM RF Dummy Fig. 3)	90.1 MHz (400 Hz 30%)	90.1 MHz (CH2)	TP1 ...(+) TP10 ...(−)	L1 (FM ANT 1st) L4 (FM ANT 2nd) L5 (FM ANT 3rd)	Adjust for maximum reading on AC voltmeter
(5)	FM	"	106.1 MHz (400 Hz 30%)	106.1 MHz (CH4)	TP1 ...(+) TP10 ...(−)	CT1 (FM ANT 1st) CT2 (FM ANT 2nd) CT3 (FM ANT 3rd)	"
(6)		Repeat steps 4 and 5.					

■ DC BALANCE NB ALIGNMENT

BAND	FM SIGNAL GENERATOR: CONNECTIONS	FM SIGNAL GENERATOR: FREQUENCY	FREQUENCY DISPLAY SETTING	DC VOLTMETER (center "0")	ADJUSTMENT	REMARKS
FM	Antenna scoket	90.1 MHz (400 Hz, 30% Mod, 60 dB)	90.1 MHz	TP3 (?) ...(+) TP4 (?) ...(−)	T2	Adjust T2 for −0.05~+0.05V reading on DC voltmeter.

■ FM SEPARATION (Intercom power switch to off)

CIRCUIT	SIGNAL GENRATOR	FREQUENCY COUNTER	AC VOLTMETER	ADJUSTMENT	REMARKS
SEPARATION	90.1 MHz (400 Hz, 30% Mod, 74 dB)	———	[illegible] ...Lch (+) [illegible] ...Rch (+) [illegible] ...(−)	VR1 (Separation)	Make adjustment so that when the antenna input is subjected to L modulation (or R modulation.) R channel output (or L channel output) becomes minimum.

■ AZIMUTH ALIGNMENT

TAPE	MEASUREMENT POINT	SPECIFICATION	ADJUSTMENT	REMARKS
QZZCFM (8kHz, −20dB)	[illegible] ...Lch (+) [illegible] ...Rch (+) [illegible] ...(−)	Maximum output	Azimuth Screw (Refer to Fig. 6)	Playback mode (FWD & REV)

■ AVC GAIN ALIGNMENT

FM SIGNAL GENERATOR: CONNECTIONS	FM SIGNAL GENERATOR: FREQUENCY	FREQUENCY DISPLAY SETTING	SPECIFICATION	ADJUSTMENT	REMARKS
Connect to antenna socket through FM RF dummy antenna. (Refer to Fig. 3)	90.1 MHz (1 kHz, 30% Mod, 60 dB)	90.1 MHz	SP 50mW (0.4V/3Ω) =0Hz (0dB)	VR304	• AVC Volume ... Center • Tone Volume ... Center • Adjust VR304 for 0Hz (0dB) → 100Hz (5±0.5dB) reading on pulse.

Adjustment and Connection Procedures

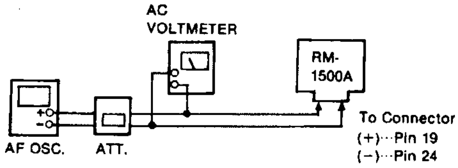
<Adjustment Procedures>

1. Set the AVC VR (VR304) to the center position.
2. Adjust the VR for the volume adjustment so that the output of the speaker is 50mW (0.4V/3Ω). At this time, the output level should measure 0dB.
3. Set the AF Oscillator's output to 100Hz, 5Vp-p and send it to the connector.



4. Adjust the VR304 when the speaker's output has a value of 5dB±0.5dB.

<Connection Scheme>



■ ALIGNMENT POINT

- Please refer to Circuit Board and Wiring Connection Diagram for test point locations.

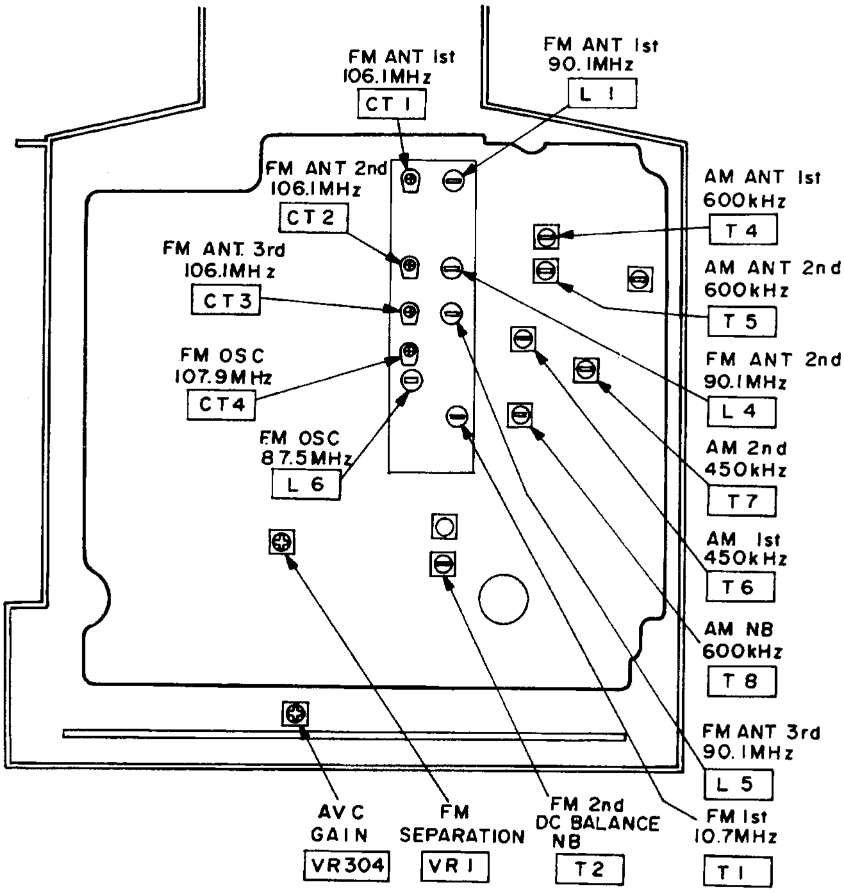


Fig. 1

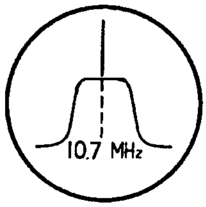


Fig. 4

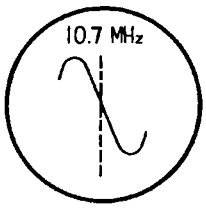


Fig. 5

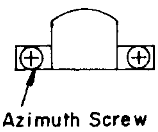


Fig. 6

■ AM RF DUMMY ANTENNA

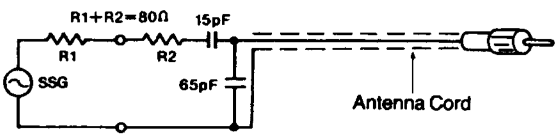


Fig. 2

■ FM RF DUMMY ANTENNA

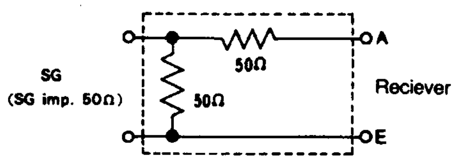
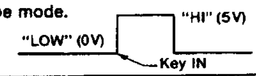


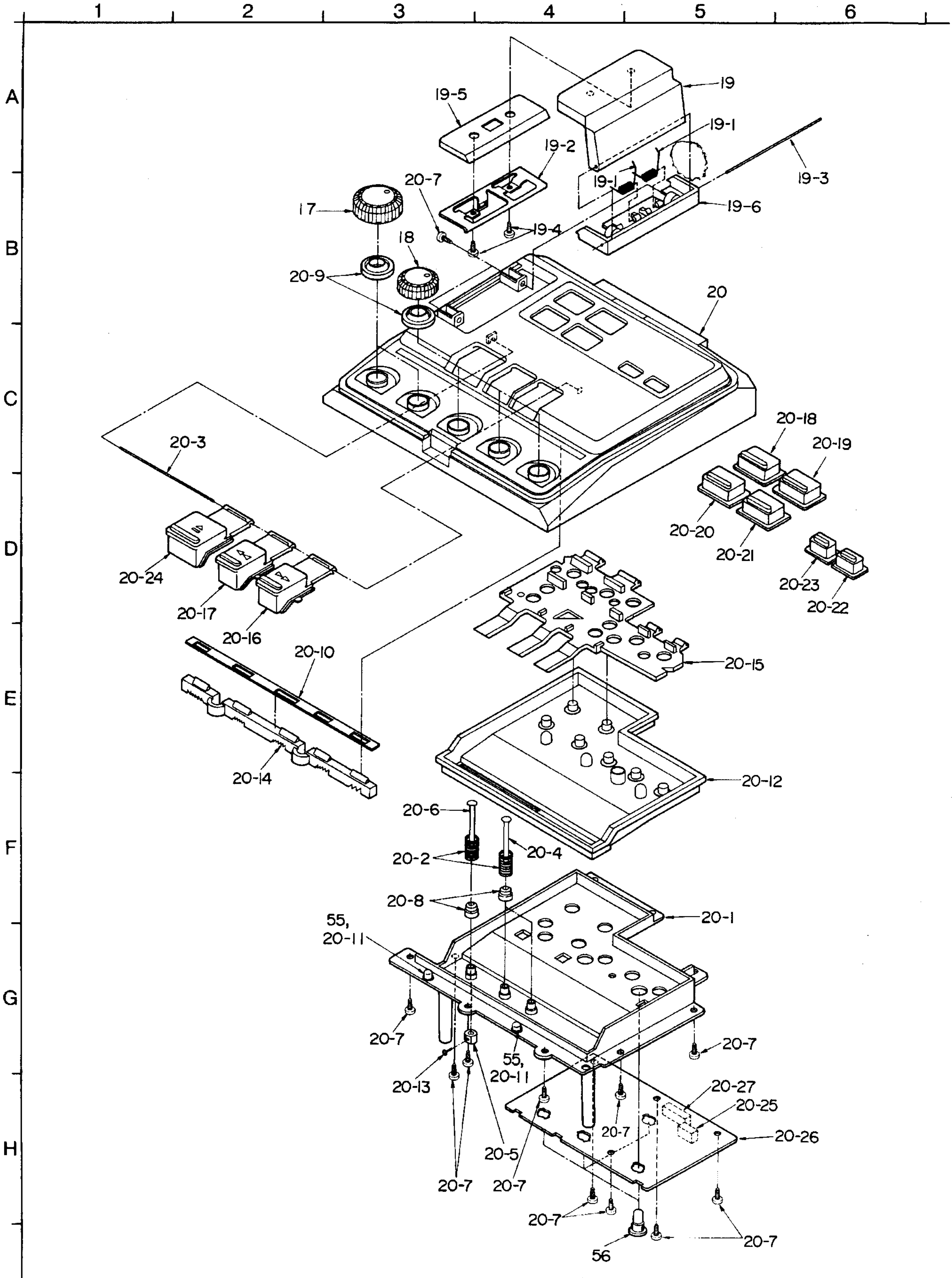
Fig. 3

IC9 (UPD1714GA929) EACH TERMINAL FUNCTION

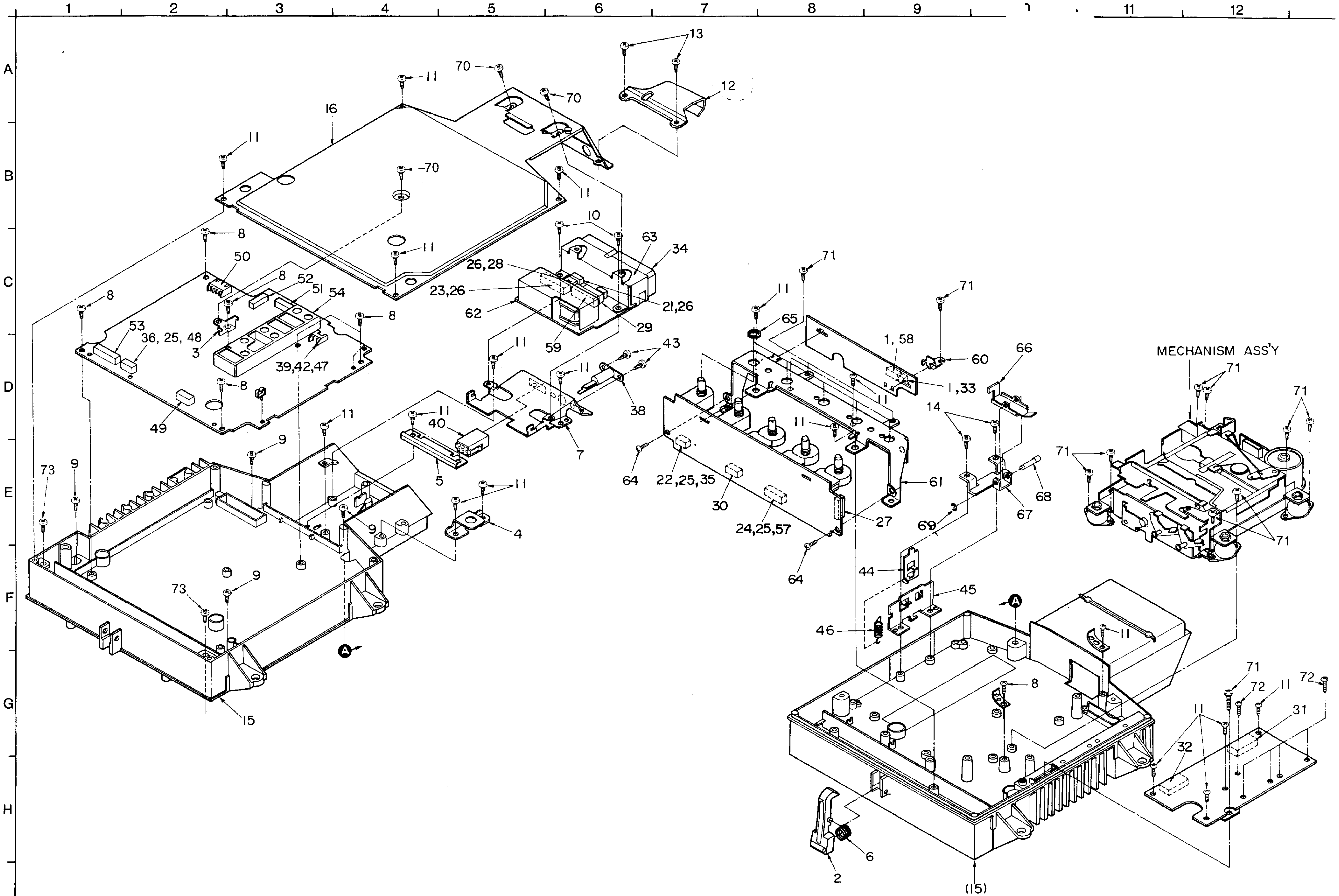
■ Explanation of each terminal

Pin No.	Mark	Pin Name	Function
1	NC	—	—
2	E01	PLL error output	This pin provides the signal needed to control the tuning circuit (antenna and OSC) for each band. The signal appearing at this pin is coupled to an L.P.F. (Q36, 37), which controls varactor diodes D1-4, 6, 13. The local OSC and reference frequencies applied to pins 5 and 6 are compared. If the local OSC frequency exceeds the reference, this pin is set high; if it is lower than the reference, it is set low; if they are identical, this pin floats.
3	E02	PLL error output	—
4, 8	GND	Ground	Connected to ground.
5	V_{LOL}	AM local OSC signal input	This pin accepts an AM Local OSC signal from IC5 (pin 20) as an AM tuning circuit control signal.
6	V_{LOH}	FM local OSC signal input	This pin accepts an FM Local OSC signal from IC1 (pin 1) as an FM tuning circuit control signal.
7	CE	Chip Enable input	Accepts a Chip Enable signal: High level...All device functions are enabled. Low level...All device inputs are disabled (except Memory Hold).
9	T/R	Tape/Radio mode switching output	Provides a Tape/Radio Switching signal: High level: Tape mode, switching transistor Q34 is turned on to supply power to the tape circuit. Low level: Radio mode, Q34 is turned off, which then turns Q28 on to supply power to the radio circuit.
10	FM/AM	Radio band switching output	Provides an FM/AM band switching signal: High level: FM mode, a high level is applied to the base of transistor Q31 to turn it on, this pulls the base of Q29 low and turns it on to supply power to the FM circuit. Low level: AM mode, a low level is applied to the base of transistor Q31 to turn it off, this pulls the base of Q28 high and turns it on to supply power to the AM circuit.
11	HS/SP	Headphones/ speaker switching signal output	Provides a headphones/speaker switching signal. High level: Selects the speaker. Low level: Selects the headphones.
12	SD	Auto-tuning detection input	If a station is encountered during auto-tuning, a high level signal is applied to this pin to stop tuning scan.
13	ST	FM stereo/ mono signal input	Provides an FM stereo/mono switching signal to IC3 (pin 6). High level: FM mono mode Low level: FM stereo mode
14	F/R	FWD/REV switching input	Accepts a FWD/REV switching signal. High level: FWD operation Low level: REV operation
15	PC3	—	—
16	TAPE IN	Tape load input	Checks if a cassette tape is loaded. High level: Cassette tape loaded. Low level: No Cassette tape loaded.
17	FF/RE	Tape FF/REW switching input	Accepts on FF/RE switching signal. High level: FF/REW Low level: [redacted] PLAY
18	METAL	Metal tape input	Checks whether the loaded tape is a metal tape or not. High level: Metal tape Low level: Non-metal (normal) tape
19	K MUTE	Mute signal input	Accepts a Mute signal when a key operation is made. High level: Muting on Low level: Muting off
20	Dolby	Dolby on/off signal output	Provides a Dolby on/off signal. High level: Dolby on (In) Low level: Dolby off (Out) This signal switches transistor Q24 on or off to control the Dolby IC, IC8 (pins 3 and 18).
21	AMB	Ambience on/off signal output	Provides an Ambience on/off signal. High level: Ambience operation on Low level: Ambience operation off
22	A MUTE	Mute signal output	If the Mute on/off signal is applied to pin 17 of the device, this pin yields a Muting signal to the base of Q9. High level: Muting off Low level: Muting on
23	RR0	Cassette deck program switching output	Provides a pulse signal if the TUNE DOWN/IRO key is pressed to on in the Tape mode. 
24, 25	$\bar{X0}$, $\bar{X1}$	Crystal resonator inputs	A 4.5 MHz crystal resonator is connected across these pins.
26	VDD	Power supply input	Accepts a +5V power.
27	CGP	—	—
28	S27	LCD driving signal (blank) output	Provides an LCD driving signal to Q48.
29	S26	LCD driving signal (load) output	Provides an LCD driving signal to Q48.
30	S25	LCD driving signal clock output	Provides an LCD driving signal to Q47.
31	S24	LCD driving signal data output	Provides LCD display data to Q47.
32 ∫ 50	S23 ~S5	LCD segment signal outputs	—
51 ∫ 54	S4~S1	Key matrix signal outputs	Provides key matrix signals.
55	S0	Key matrix signal output	—
56, 57	COM1 COM2	LCD common signal output	—
59 ∫ 62	K3~K0	Key return signal inputs	Accept data signal lines from keys.

CABINET PARTS LOCATION (Please refer to Cabinet Parts List on page 29.)

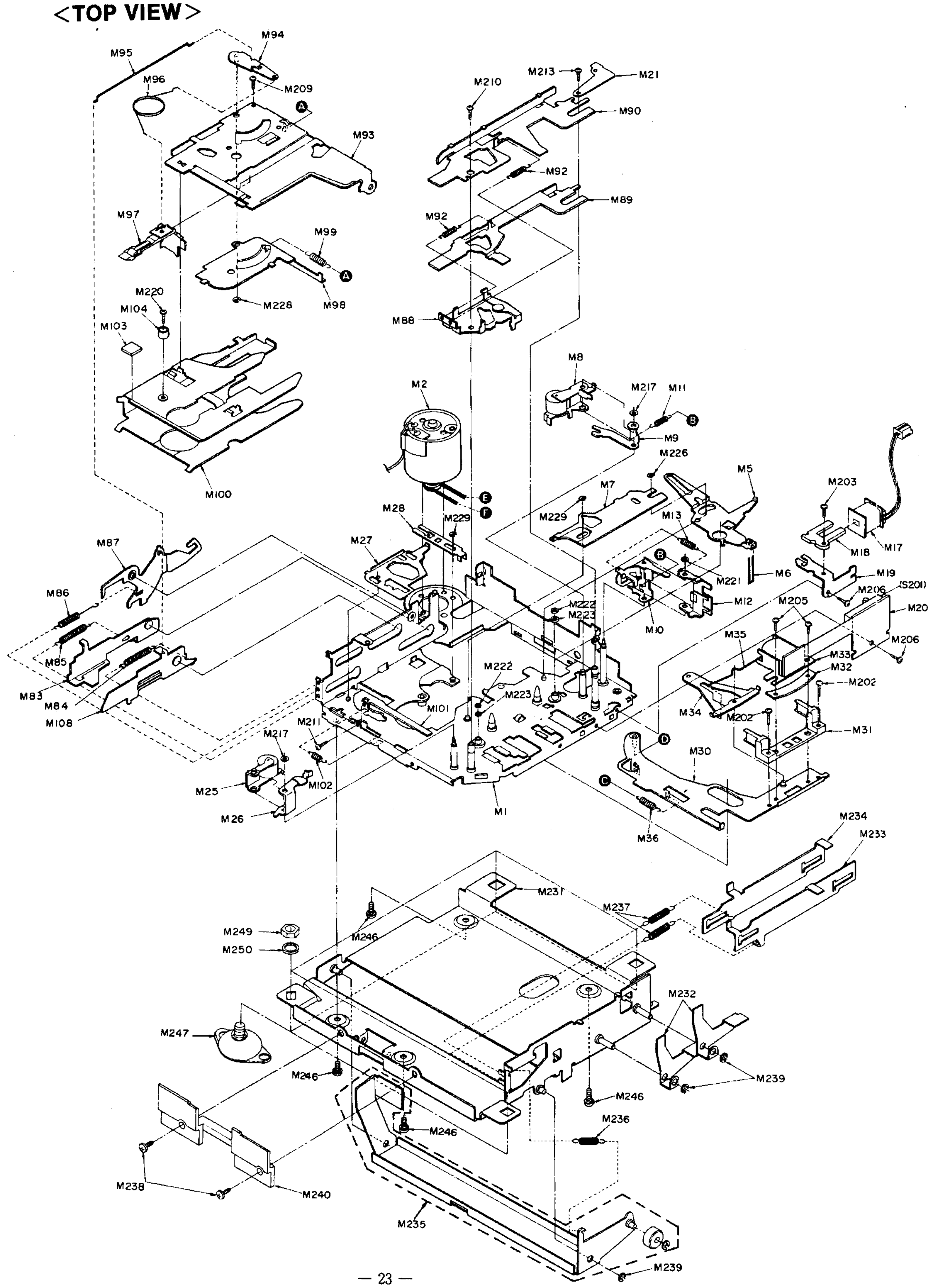


CABINET PARTS LOCATION (Please refer to Cabinet rts List on page 29.)



MECHANISM PARTS LOCATION (Please refer to Mechanism Parts List on page 30.)

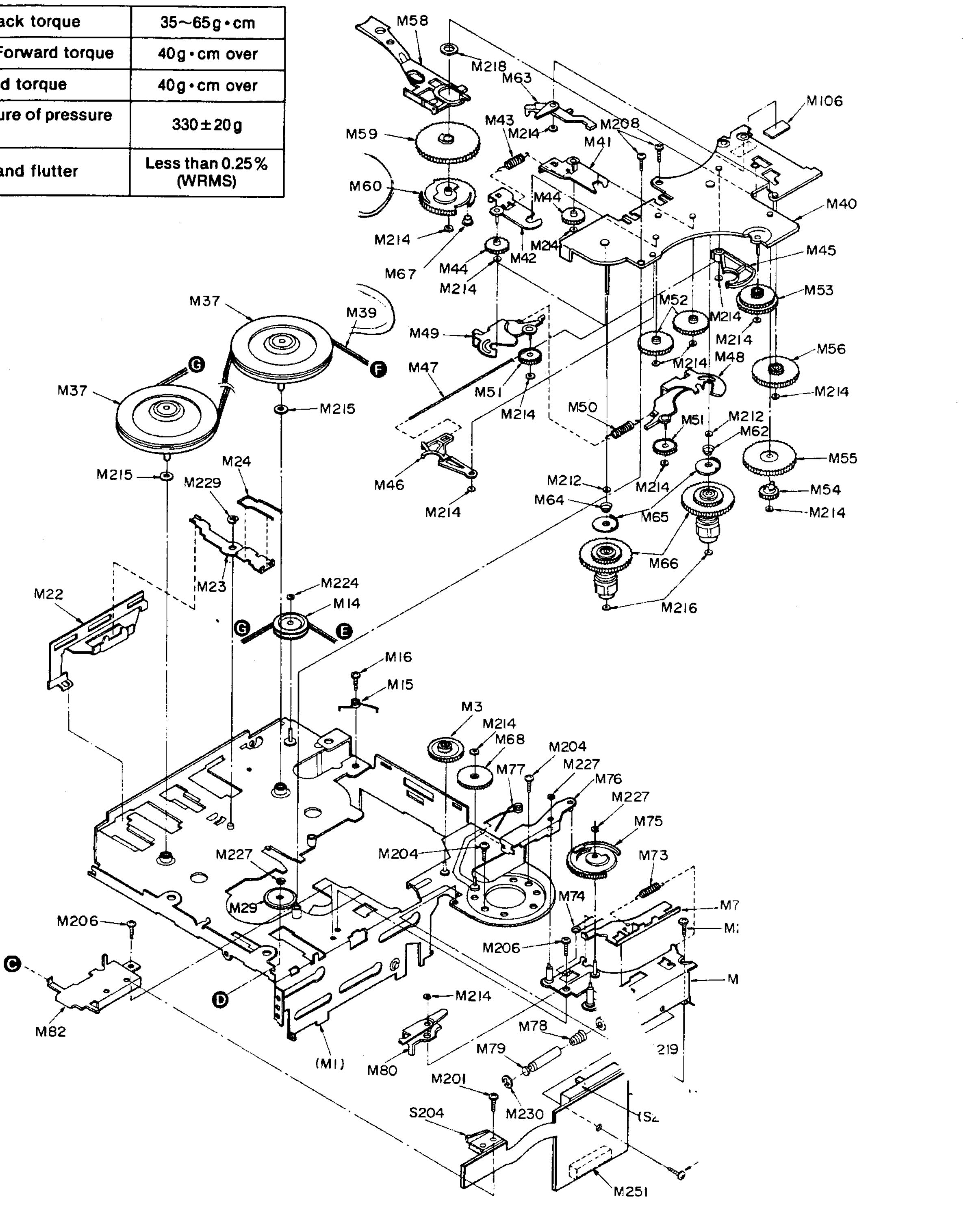
<TOP VIEW>



<BOTTOM VIEW>

Specifications

Playback torque	35~65g・cm
Fast Forward torque	40g・cm over
Rewind torque	40g・cm over
Pressure of pressure roller	330±20g
Wow and flutter	Less than 0.25% (WRMS)



RESISTORS & CAPACITORS

Notes : * Important safety notice :
Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components use only manufacturer's specified parts.
* Bracketed indications in Ref. No. columns specify the area. (Refer to the first page for area.)
Parts without these indications can be used for all areas.

Numbering System of Resistor

Example:

ERD	25	F	J	102
Type	Wattage (1/4W)	Shape	Tolerance	Value (1KΩ)
ERX	2	AN	J	471
Type	Wattage (2W)	Shape	Tolerance	Value (470Ω)

Numbering System of Capacitor

Example:

ECKD	1H	102	Z	F
Type	Voltage (50V)	Value (0.001µF)	Tolerance	Peculiarity
ECEA	50	M	330	
Type	Voltage (50V)	Peclarity	Value (33µF)	

※ Capacity is stated in microfarads (µF) unless specified otherwise, P=Pico-farads.
※ Resistance is stated in ohms (Ω), unless specified otherwise, 1K=1,000Ω, 1M=1,000KΩ

Resistor Type	Wattage		Tolerance
ERD : Carbon	10 : 1/8W	12 : 1/2W	J : ±5%
ERG : Metal Oxide	14 : 1/4W	25 : 1/4W	F : ±1%
ERQ : Fuse Type Metal	1A : 1W	18 : 1/8W	G : ±2%
ERX : Metal Film	S2 : 1/4W	S1 : 1/2W	J : ±5%
ERD L : Carbon (chip)	2F : 1/4W	50 : 1/2W	K : ±10%
ERO K : Metal Film (chip)	2A : 2W	3A : 3W	M : ±20%
ERC : Solid	6G : 1/10W	8G : 1/8W	
ERF : Incombustible Box-Shaped			
ERM : Wire-Wound			
RRJ : Cip Resistor			
ERJ : Cip Resistor			

Capacitor Type	Voltage		Tolerance
ECE : Electrolytic	0J : 6.3V	1A : 10V	K : ±10%
ECCD : Ceramic	1C : 16V	1E : 25V	M : ±20%
ECKD : Ceramic Capacitor	1H : 50V	1V : 35V	Z : $^{+80}_{-20}$ %
ECQM : Poyester	50 : 50V	05 : 50V	J : ±5%
ECQP : Polypropylene	2H : 500V	2A : 100V	G : ±2%
ECG : Ceramic	1 : 100V	1J : 63V	F : ±1%
ECEA N : Non Polar Electrolytic	KC : 400V AC		C : ±0.25pF
QCU : Ceramic (Chip Type)	KC : 125V AC (UL)		D : ±0.5pF
ECUX : Ceramic (Chip Type)			
ECF : Semiconductor			
EECW : Liquid electrolyte double layer capacitor			

Ref. No.	Part No.	Value.	Ref. No.	Part No.	Value.	Ref. No.	Part No.	Value.
RESISTORS(VALUE,WATTAGE)			R42	RRJ6GCJ474	470K 1/10	R86	ERDS2TJ330	33 1/4
R1	RRJ6GCJ104TE	100K 1/10	R43	RRJ6GCJ332TE	3.3K 1/10	R87	ERDS2TJ332	3.3K 1/4
R2	RRJ6GCJ224TE	220K 1/10	R44	RRJ6GCJ102TE	1K 1/10	R88	RRJ6GCJ822	8.2K 1/10
R3	RRJ6GCJ224TE	220K 1/10	R45	RRJ6GCJ102TE	1K 1/10	R89	RRJ6GCJ472TE	4.7K 1/10
R4	RRJ6GCJ101TE	100 1/10	R46	ERDS2TJ332	3.3K 1/4	R90	RRJ6GCJ682TE	6.8K 1/10
R5	ERDS2TJ154	150K 1/4	R47	RRJ6GCJ223TE	22K 1/10	R91	RRJ6GCJ103TE	10K 1/10
R6	RRJ6GCJ224TE	220K 1/10	R48	ERDS2TJ223	22K 1/4	R92	ERDS2TJ472	4.7K 1/4
R7	RRJ6GCJ221TE	220 1/10	R49	RRJ6GCJ104TE	100K 1/10	R93	RRJ6GCJ472TE	4.7K 1/10
R8	ERDS2TJ101	100 1/4	R50	RRJ6GCJ104TE	100K 1/10	R94	RRJ6GCJ562	5.6K 1/10
R9	RRJ6GCJ104TE	100K 1/10	R51	RRJ6GCJ104TE	100K 1/10	R95	RRJ6GCJ473TE	47K 1/10
R10	RRJ6GCJ104TE	100K 1/10	R52	ERDS2TJ103	10K 1/4	R96	RRJ6GCJ683TE	68K 1/10
R12	RRJ6GCJ104TE	100K 1/10	R53	RRJ6GCJ103TE	10K 1/10	R97	RRJ6GCJ274TE	270K 1/10
R13	ERDS2TJ470	47 1/4	R54	RRJ6GCJ332TE	3.3K 1/10	R98	RRJ6GCJ682TE	6.8K 1/10
R14	ERDS2TJ331	330 1/4	R55	RRJ6GCJ182	1.8K 1/10	R99	ERDS2TJ272	2.7K 1/4
R15	ERDS2TJ471	470 1/4	R56	RRJ6GCJ182	1.8K 1/10	R100	RRJ6GCJ184TE	180K 1/10
R16	ERDS2TJ102	1K 1/4	R57	ERDS2TJ103	10K 1/4	R101	ERDS2TJ270T	27 1/4
R17	ERDS2TJ101	100 1/4	R60	RRJ6GCJ274TE	270K 1/10	R102	ERDS2TJ105	1M 1/4
R18	ERDS2TJ331	330 1/4	R61	RRJ6GCJ274TE	270K 1/10	R103	ERDS2TJ332	3.3K 1/4
R19	RRJ6GCJ822	8.2K 1/10	R62	RRJ6GCJ274TE	270K 1/10	R104	ERDS2TJ682	6.8K 1/4
R20	RRJ6GCJ470TE	47 1/10	R63	RRJ6GCJ102TE	1K 1/10	R105	RRJ6GCJ223TE	22K 1/10
R21	ERDS2TJ473	47K 1/4	R64	RRJ6GCJ102TE	1K 1/10	R107	ERDS2TJ223	22K 1/4
R22	ERDS2TJ683	68K 1/4	R65	RRJ6GCJ221TE	220 1/10	R108	ERDS2TJ822	8.2K 1/4
R23	RRJ6GCJ102TE	1K 1/10	R66	RRJ6GCJ103TE	10K 1/10	R109	RRJ6GCJ682TE	6.8K 1/10
R24	ERDS2TJ103	10K 1/4	R67	RRJ6GCJ103TE	10K 1/10	R110	ERDS2TJ473	47K 1/4
R25	ERDS2TJ103	10K 1/4	R68	RRJ6GCJ332TE	3.3K 1/10	R111	ERDS2TJ473	47K 1/4
R26	ERDS2TJ472	4.7K 1/4	R69	RRJ6GCJ332TE	3.3K 1/10	R112	RRJ6GCJ223TE	22K 1/10
R27	ERDS2TJ332	3.3K 1/4	R70	RRJ6GCJ470TE	47 1/10	R113	RRJ6GCJ102TE	1K 1/10
R28	ERDS2TJ273	27K 1/4	R71	RRJ6GCJ470TE	47 1/10	R116	RRJ6GCJ471TE	470 1/10
R29	RRJ6GCJ472TE	4.7K 1/10	R72	RRJ6GCJ104TE	100K 1/10	R117	ERDS2TJ103	10K 1/4
R30	RRJ6GCJ153	15K 1/10	R73	ERDS2TJ154	150K 1/4	R118	RRJ6GCJ473TE	47K 1/10
R31	RRJ6GCJ562	5.6K 1/10	R74	RRJ6GCJ103TE	10K 1/10	R119	RRJ6GCJ471TE	470 1/10
R32	ERDS2TJ101	100 1/4	R75	RRJ6GCJ820TE	82 1/10	R120	ERDS2TJ182	1.8K 1/4
R33	RRJ6GCJ183TE	18K 1/10	R76	ERDS2TJ103	10K 1/4	R121	RRJ6GCJ103TE	10K 1/10
R34	ERDS2TJ330	33 1/4	R77	RRJ6GCJ272TE	2.7K 1/10	R122	ERDS2TJ473	47K 1/4
R35	RRJ6GCJ333	33K 1/10	R78	ERDS2TJ154	150K 1/4	R123	RRJ6GCJ103TE	10K 1/10
R36	RRJ6GCJ473TE	47K 1/10	R79	ERDS2TJ154	150K 1/4	R124	RRJ6GCJ222TE	2.2K 1/10
R37	RRJ6GCJ821TE	820 1/10	R80	ERDS2TJ100	10 1/4	R127	RRJ6GCJ104TE	100K 1/10
R38	ERDS2TJ102	1K 1/4	R81	ERDS2TJ680	68 1/4	R128	RRJ6GCJ104TE	100K 1/10
R39	RRJ6GCJ102TE	1K 1/10	R82	RRJ6GCJ221TE	220 1/10	R129	RRJ6GCJ471TE	470 1/10
R40	RRJ6GCJ102TE	1K 1/10	R83	RRJ6GCJ152	1.5K 1/10	R130	RRJ6GCJ820TE	82 1/10
R41	RRJ6GCJ474	470K 1/10	R84	ERDS2TJ332	3.3K 1/4	R131	RRJ6GCJ474	470K 1/10
			R85	ERDS2TJ105	1M 1/4	R132	RRJ6GCJ153	15K 1/10

Ref. No.	Part No.	Value.	Ref. No.	Part No.	Value.	Ref. No.	Part No.	Value.
R133	ERDS2TJ101	100 1/4	R329	RRJ6GCJ333	33K 1/10	R432	RRJ6GCJ222TE	2.2K 1/10
R134	RRJ6GCJ474	470K 1/10	R330	RRJ6GCJ104TE	100K 1/10	R433	RRJ6GCJ3R3TE	3.3 1/10
R135	RRJ6GCJ153	15K 1/10	R331	RRJ6GCJ102TE	1K 1/10	R434	RRJ6GCJ3R3TE	3.3 1/10
R136	RRJ6GCJ820TE	82 1/10	R332	ERDS2TJ563	56K 1/4	R435	RRJ6GCJ3R3TE	3.3 1/10
R143	RRJ6GCJ104TE	100K 1/10	R333	RRJ6GCJ472TE	4.7K 1/10	R438	RRJ6GCJ822	8.2K 1/10
R144	RRJ6GCJ223TE	22K 1/10	R334	RRJ6GCJ104TE	100K 1/10	R439	RRJ6GCJ394TE	390K 1/10
R145	RRJ6GCJ104TE	100K 1/10	R335	ERDS2TJ154	150K 1/4	R440	RRJ6GCJ332TE	3.3K 1/10
R147	ERDS2TJ101	100 1/4	R336	RRJ6GCJ103TE	10K 1/10	R441	RRJ6GCJ561TE	560 1/10
R161	ERDS2TJ273	27K 1/4	R337	RRJ6GCJ104TE	100K 1/10	R443	RRJ6GCJ473TE	47K 1/10
R162	ERDS2TJ273	27K 1/4	R338	RRJ6GCJ103TE	10K 1/10	R444	RRJ6GCJ473TE	47K 1/10
R168	RRJ6GCJ682TE	6.8K 1/10	R339	RRJ6GCJ151TE	150 1/10	R445	RRJ6GCJ822	8.2K 1/10
R169	RRJ6GCJ222TE	2.2K 1/10	R340	RRJ6GCJ271TE	270 1/10	R446	RRJ6GCJ394TE	390K 1/10
R170	RRJ6GCJ472TE	4.7K 1/10	R341	RRJ6GCJ394TE	390K 1/10	R447	RRJ6GCJ561TE	560 1/10
R171	ERDS2TJ101	100 1/4	R342	RRJ6GCJ221TE	220 1/10	R448	RRJ6GCJ332TE	3.3K 1/10
R172	RRJ6GCJ102TE	1K 1/10	R343	RRJ6GCJ394TE	390K 1/10	R449	RRJ6GCJ332TE	3.3K 1/10
R173	RRJ6GCJ222TE	2.2K 1/10	R344	RRD18XJ392V	3.9K 1/8	R452	RRJ6GCJ104TE	100K 1/10
R174	RRJ6GCJ103TE	10K 1/10	R345	RRJ6GCJ332TE	3.3K 1/10	R454	RRJ6GCJ220TE	22 1/10
R175	RRJ6GCJ103TE	10K 1/10	R346	RRJ6GCJ153	15K 1/10	R455	RRJ6GCJ3R3TE	3.3 1/10
R176	RRJ6GCJ103TE	10K 1/10	R347	RRJ6GCJ564TE	560K 1/10	R456	RRJ6GCJ3R3TE	3.3 1/10
R178	ERDS2TJ102	1K 1/4	R348	RRJ6GCJ471TE	470 1/10	R457	RRJ6GCJ3R3TE	3.3 1/10
R179	ERDS2TJ104	100K 1/4	R349	RRJ6GCJ222TE	2.2K 1/10	R458	RRD18XJ104V	100K 1/8
R180	ERDS2TJ331	330 1/4	R350	RRJ6GCJ102TE	1K 1/10	R464	RRJ6GCJ223TE	22K 1/10
R181	ERDS2TJ104	100K 1/4	R351	RRJ6GCJ222TE	2.2K 1/10	R465	RRJ6GCJ223TE	22K 1/10
R182	ERDS2TJ331	330 1/4	R352	RRJ6GCJ564TE	560K 1/10	R467	RRJ6GCJ474	470K 1/10
R183	RRJ6GCJ681TE	680 1/10	R353	RRJ6GCJ473TE	47K 1/10	R468	RRJ6GCJ103TE	10K 1/10
R184	RRJ6GCJ103TE	10K 1/10	R354	RRJ6GCJ473TE	47K 1/10	R470	RRJ6GCJ220TE	22 1/10
R185	RRJ6GCJ102TE	1K 1/10	R355	RRJ6GCJ684TE	680K 1/10	R471	RRJ6GCJ102TE	1K 1/10
R186	ERDS2TJ103	10K 1/4	R356	ERDS2TJ103	10K 1/4	R472	RRJ6GCJ102TE	1K 1/10
R189	RRJ6GCJ102TE	1K 1/10	R357	RRJ6GCJ102TE	1K 1/10	R473	RRJ6GCJ102TE	1K 1/10
R190	RRJ6GCJ102TE	1K 1/10	R358	RRJ6GCJ101TE	100 1/10	R474	RRJ6GCJ220TE	22 1/10
R193	RRJ6GCJ102TE	1K 1/10	R359	RRJ6GCJ332TE	3.3K 1/10	R475	RRJ6GCJ220TE	22 1/10
R194	RRJ6GCJ102TE	1K 1/10	R360	RRJ6GCJ332TE	3.3K 1/10	R476	RRJ6GCJ102TE	1K 1/10
R195	ERDS2TJ471	470 1/4	R361	RRJ6GCJ332TE	3.3K 1/10	R477	RRJ6GCJ102TE	1K 1/10
R198	RRJ6GCJ473TE	47K 1/10	R362	RRJ6GCJ332TE	3.3K 1/10	R478	RRJ6GCJ102TE	1K 1/10
R199	RRJ6GCJ103TE	10K 1/10	R363	RRJ6GCJ471TE	470 1/10	R479	RRJ6GCJ220TE	22 1/10
R200	RRJ6GCJ103TE	10K 1/10	R364	RRJ6GCJ681TE	680 1/10	R480	RRJ6GCJ102TE	1K 1/10
R201	RRJ6GCJ103TE	10K 1/10	R367	RRJ6GCJ473TE	47K 1/10	R481	RRJ6GCJ102TE	1K 1/10
R202	RRJ6GCJ332TE	3.3K 1/10	R368	RRJ6GCJ101TE	100 1/10	R501	RRJ6GCJ101TE	100 1/10
R203	RRJ6GCJ332TE	3.3K 1/10	R369	RRJ6GCJ104TE	100K 1/10	R502	RRJ6GCJ101TE	100 1/10
R204	RRJ6GCJ474	470K 1/10	R370	RRJ6GCJ101TE	100 1/10	R503	RRJ6GCJ183TE	18K 1/10
R205	RRJ6GCJ474	470K 1/10	R374	RRJ6GCJ222TE	2.2K 1/10	R505	RRJ6GCJ332TE	3.3K 1/10
R206	RRJ6GCJ821TE	820 1/10	R375	RRJ6GCJ391TE	390 1/10	R506	RRJ6GCJ332TE	3.3K 1/10
R207	RRJ6GCJ821TE	820 1/10	R376	RRJ6GCJ391TE	390 1/10	R601	RRJ6GCJ103TE	10K 1/10
R208	ERDS2TJ103	10K 1/4	R377	RRJ6GCJ332TE	3.3K 1/10	R602	RRJ6GCJ683TE	68K 1/10
R209	ERDS2TJ103	10K 1/4	R378	RRJ6GCJ683TE	68K 1/10	R603	RRJ6GCJ334TE	330K 1/10
R210	RRJ6GCJ681TE	680 1/10	R379	RRJ6GCJ683TE	68K 1/10	R604	RRJ6GCJ102TE	1K 1/10
R211	RRJ6GCJ221TE	220 1/10	R380	RRJ6GCJ392	3.9K 1/10	R605	RRJ6GCJ104TE	100K 1/10
R212	RRJ6GCJ221TE	220 1/10	R381	RRJ6GCJ472TE	4.7K 1/10	R606	ERDS2TJ104	100K 1/4
R213	RRJ6GCJ103TE	10K 1/10	R382	RRJ6GCJ472TE	4.7K 1/10	R607	RRJ6GCJ471TE	470 1/10
R301	RRJ6GCJ474	470K 1/10	R401	RRJ6GCJ563TE	56K 1/10	R608	RRJ6GCJ104TE	100K 1/10
R302	RRJ6GCJ222TE	2.2K 1/10	R402	RRJ6GCJ563TE	56K 1/10	RJ1	RRJ6GCJ000TE	
R303	RRJ6GCJ222TE	2.2K 1/10	R403	RRJ6GCJ473TE	47K 1/10	RJ2	RRJ6GCJ000TE	
R304	RRJ6GCJ183TE	18K 1/10	R404	RRJ6GCJ473TE	47K 1/10	RJ4	RRJ6GCJ000TE	
R305	RRJ6GCJ393TE	39K 1/10	R405	RRJ6GCJ473TE	47K 1/10	RJ5	RRJ6GCJ000TE	
R306	RRJ6GCJ392	3.9K 1/10	R406	RRJ6GCJ473TE	47K 1/10	RJ7	RRJ6GCJ000TE	
R307	RRD18XJ682V	6.8K 1/8	R407	RRJ6GCJ2R2TE	2.2 1/10	RJ8	RRJ6GCJ000TE	
R308	RRJ6GCJ824TE	820K 1/10	R408	RRJ6GCJ153	15K 1/10	RJ9	RRJ6GCJ000TE	
R309	RRJ6GCJ681TE	680 1/10	R409	RRJ6GCJ153	15K 1/10	RJ352	RRJ6GCJ000TE	
R310	RRJ6GCJ392	3.9K 1/10	R411	RRJ6GCJ824TE	820K 1/10	RJ353	RRJ6GCJ000TE	
R311	RRJ6GCJ121TE	120 1/10	R412	RRJ6GCJ221TE	220 1/10	RJ354	RRJ6GCJ000TE	
R312	RRJ6GCJ104TE	100K 1/10	R413	RRJ6GCJ471TE	470 1/10	RJ355	RRJ6GCJ000TE	
R313	RRJ6GCJ222TE	2.2K 1/10	R414	RRJ6GCJ824TE	820K 1/10	RJ357	RRJ6GCJ000TE	
R314	ERDS2TJ104	100K 1/4	R415	RRJ6GCJ471TE	470 1/10	RJ360	RRJ6GCJ000TE	
R315	RRJ6GCJ221TE	220 1/10	R416	RRJ6GCJ332TE	3.3K 1/10	RJ371	RRD18XJ000V	
R316	RRJ6GCJ474	470K 1/10	R417	RRJ6GCJ221TE	220 1/10	RJ372	RRD18XJ000V	
R317	RRJ6GCJ222TE	2.2K 1/10	R418	RRJ6GCJ223TE	22K 1/10	RJ373	RRD18XJ000V	
R318	RRJ6GCJ393TE	39K 1/10	R419	RRJ6GCJ223TE	22K 1/10	RJ374	RRD18XJ000V	
R319	RRJ6GCJ183TE	18K 1/10	R420	RRJ6GCJ103TE	10K 1/10	RJ375	RRD18XJ000V	
R320	RRJ6GCJ682TE	6.8K 1/10	R421	RRJ6GCJ103TE	10K 1/10	RJ376	RRD18XJ000V	
R321	RRJ6GCJ392	3.9K 1/10	R422	RRJ6GCJ224TE	220K 1/10	RJ451	RRJ6GCJ000TE	
R322	RRJ6GCJ824TE	820K 1/10	R424	RRJ6GCJ182	1.8K 1/10	RJ452	RRJ6GCJ000TE	
R323	RRJ6GCJ121TE	120 1/10	R425	RRJ6GCJ182	1.8K 1/10	RJ453	RRJ6GCJ000TE	
R324	RRJ6GCJ392	3.9K 1/10	R426	RRJ6GCJ221TE	220 1/10	RJ471	RRD18XJ000V	
R325	RRJ6GCJ681TE	680 1/10	R427	RRJ6GCJ221TE	220 1/10	RJ472	RRD18XJ000V	
R326	RRJ6GCJ103TE	10K 1/10	R428	RRJ6GCJ223TE	22K 1/10	RJ473	RRD18XJ000V	
R327	RRJ6GCJ103TE	10K 1/10	R429	RRJ6GCJ223TE	22K 1/10	RJ571	RRD18XJ000V	
R328	RRD18XJ104V	100K 1/8	R430	RRJ6GCJ104TE	100K 1/10	RJ572	RRD18XJ000V	

Ref. No.	Part No.	Value.
RJ671	RRD18XJ000V	
RJ672	RRD18XJ000V	
RJ673	RRD18XJ000V	
CAPACITORS(VALUE,VOLTAGE)		
C1	RCUV1H220KC	22P 50
C2	RCUV1H220KC	22P 50
C3	RCUV1H150KC	15P 50
C4	RCUV1H102MD	0.001 50
C5	RCUV1H102MD	0.001 50
C6	RCUV1H102MD	0.001 50
C7	RCUV1E103MD	0.01 25
C9	RCUV1H010CC	1P 50
C10	RCUV1H150KC	15P 50
C12	RCUV1H150KC	15P 50
C13	RCUV1H390KC	39P 50
C14	RCUV1H180KC	18P 50
C15	ECEA0JK220B	22 6.3
C16	RCUV1H470KC	47P 50
C17	RCUV1E333MD	0.033 25
C18	RCUV1E223ZF	0.022 25
C19	ECUV1E683MD	0.068 25
C20	RCUV1E223ZF	0.022 25
C21	RCUV1E333MD	0.033 25
C22	ECEA1HK010B	1 50
C23	ECEA1CK470B	47 16
C24	RCUV1E223MD	0.022 25
C25	RCUV1E223MD	0.022 25
C26	ECEA1EK4R7B	4.7 25
C27	ECEA1HKR33	0.33 50
C28	RCUV1H101K	100P 50
C29	RCUV1E223ZF	0.022 25
C30	ECEA1CK470B	47 16
C31	RCUV1E223ZF	0.022 25
C32	ECEA1HKN010B	1 50
C33	ECEA1HK010B	1 50
C34	RCUV1E223ZF	0.022 25
C35	ECEA1HKR22B	0.22 50
C36	ECEA1HK010B	1 50
C37	ECEA1HK010B	1 50
C38	RCUV1E103MD	0.01 25
C39	ECEA1HK010B	1 50
C40	RCUV1E103MD	0.01 25
C41	RCUV1E103MD	0.01 25
C42	RCUV1E223MD	0.022 25
C43	RCUV1E333MD	0.033 25
C44	ECEA1EK4R7B	4.7 25
C46	ECEA1CS102	1000 16
C47	ECEA1AK220B	22 10
C48	RCUV1H332MD	0.0033 50
C49	ECEA1HK010B	1 50
C50	ECEA1HK010B	1 50
C51	ECEA1CK100B	10 16
C52	ECEA1HK010B	1 50
C53	ECEA1HK010B	1 50
C54	ECEA1EK4R7B	4.7 25
C55	ECEA1EK3R3B	3.3 25
C56	ECEA1HK010B	1 50
C57	ECEA1HK010B	1 50
C58	ECEA0JK330B	33 6.3
C59	RCUV1E223MD	0.022 25
C60	ECEA1CK100B	10 16
C61	ECEA1CK100B	10 16
C62	ECEA1AKA221	220 10
C63	ECEA1HK010B	1 50
C64	ECEA1HK010B	1 50
C65	RCUV1E223ZF	0.022 25
C66	RCUV1H390KC	39P 50
C67	RCUV1E223ZF	0.022 25
C68	RCUV1E223ZF	0.022 25
C69	RCUV1E223ZF	0.022 25
C70	RCUV1H150KC	15P 50
C71	ECQP2A471GZ	470P 100
C72	RCUV1E103MD	0.01 25
C73	RCUV1E223ZF	0.022 25
C74	ECEA1CK100B	10 16
C75	ECEA1HKR47B	0.47 50
C76	RCUV1E223ZF	0.022 25
C77	RCUV1E103MD	0.01 25
C78	ECEA1HKR47B	0.47 50
C79	ECEA1CK101B	100 16
C80	ECEA1HK010B	1 50
C81	ECEA0JK330B	33 6.3
C82	RCUV1E223ZF	0.022 25
C83	ECEA1HK010B	1 50
C84	RCUV1E223ZF	0.022 25
C85	ECEA1CK470B	47 16
C86	RCUV1E223ZF	0.022 25
C87	RCUV1E223ZF	0.022 25
C88	RCUV1E333MD	0.033 25
C89	RCUV1H030CC	3P 50
C90	RCUV1H050DC	5P 50
C91	RCUV1E333MD	0.033 25
C92	RCUV1H221K	220P 50
C93	RCUV1H472MD	0.0047 50
C94	RCUV1E223ZF	0.022 25
C95	RCUV1H391K	390P 50
C96	RCUV1H102MD	0.001 50
C97	RCUV1E103MD	0.01 25
C98	ECEA1CK100B	10 16
C99	RCUV1E103MD	0.01 25
C100	RCUV1H331K	330P 50
C101	ECEA0JK330B	33 6.3
C102	RCUV1E103MD	0.01 25
C103	RCUV1H471K	470P 50
C104	RCUV1H391K	390P 50
C105	RCUV1E103MD	0.01 25
C106	RCUV1E333MD	0.033 25
C107	ECEA1CK101B	100 16
C108	RCUV1H102MD	0.001 50
C109	ECEA1HKN010B	1 50
C110	RCUV1E333MD	0.033 25
C111	ECEA0JK220B	22 6.3
C112	ECSF1CE105E	1 16
C113	RCUV1H101K	100P 50
C114	RCUV1H471K	470P 50
C115	ECUV1E683MD	0.068 25
C116	RCUV1E333MD	0.033 25
C117	RCUV1E333MD	0.033 25
C120	ECEA1CK101B	100 16
C121	ECEA1CK101B	100 16
C122	ECEA1EK3R3B	3.3 25
C124	ECEA1CK101B	100 16
C125	ECEA1EK3R3B	3.3 25
C126	ECEA1CK100B	10 16
C127	RCUV1E223ZF	0.022 25
C128	RCUV1H681K	680P 50
C129	RCUV1H681K	680P 50
C130	ECEA1HK0R1B	0.1 50
C131	ECEA1HK0R1B	0.1 50
C132	ECEA0JK470B	47 6.3
C133	RCUV1H682MD	0.0068 50
C134	ECEA1CK470B	47 16
C135	RCUV1H682MD	0.0068 50
C136	ECEA0JK470B	47 6.3
C139	ECEA1HK010B	1 50
C140	ECEA1HK010B	1 50
C141	ECEA1HK010B	1 50
C142	ECEA1CK470B	47 16
C150	ECEA1EK4R7B	4.7 25
C151	ECEA1HK010B	1 50
C160	ECEA1EK4R7B	4.7 25
C161	RCUV1H102MD	0.001 50
C162	ECQV1H474JZ	0.47 50
C163	ECEA1CK100B	10 16
C164	RCUV1E103MD	0.01 25
C165	ECEA1HK0R1B	0.1 50
C167	RCUV1H150KC	15P 50
C168	RCUV1H100KC	10P 50
C169	RCUV1E103MD	0.01 25
C170	ECEA0JU222V	2200 6.3
C171	ECEA0JK470B	47 6.3
C172	RCUV1E333MD	0.033 25
C173	RCUV1H102MD	0.001 50
C177	RCUV1H102MD	0.001 50
C178	RCUV1H102MD	0.001 50
C179	RCUV1H102MD	0.001 50
C180	RCUV1H102MD	0.001 50
C181	RCUV1H681K	680P 50
C182	RCUV1H681K	680P 50
C183	RCUV1H681K	680P 50
C184	RCUV1E103MD	0.01 25
C185	RCUV1E103MD	0.01 25
C301	ECQB1H223JZ3	0.022 50
C302	ECEA1HK2R2B	2.2 50
C303	RCUV1H221K	220P 50
C304	ECEA1HK010B	1 50
C305	RCUV1H221K	220P 50
C306	ECEA1HKN010B	1 50
C307	RCUV1E103MD	0.01 25
C308	ECUV1E104MD	0.1 25
C309	ECEA1HK010B	1 50
C310	ECEA1HK010B	1 50
C311	ECQB1H223JZ3	0.022 50
C312	ECEA1CS102	1000 16
C313	RCUV1H221K	220P 50
C314	ECEA1HK2R2B	2.2 50
C315	ECEA1HK010B	1 50
C316	RCUV1H221K	220P 50
C317	RCUV1E103MD	0.01 25
C318	ECUV1E104MD	0.1 25
C319	ECEA1HKN010B	1 50
C320	ECEA0JK101B	100 6.3
C321	ECEA1HK010B	1 50
C322	ECEA1HK010B	1 50
C323	ECEA0JK221B	220 6.3
C324	ECEA0JK470B	47 6.3
C325	ECEA1HKN010B	1 50
C326	ECEA1HKN010B	1 50
C327	ECEA0JK101B	100 6.3
C328	RCUV1E223MD	0.022 25
C329	RCUV1H102MD	0.001 50
C330	ECUV1E104MD	0.1 25
C331	ECEA1HK2R2B	2.2 50
C332	ECEA1HK010B	1 50
C333	RCUV1H103ZF	0.01 50
C334	ECQB1H103JZW	0.01 50
C335	ECEA1HKR22B	0.22 50
C336	RCUV1H391K	390P 50
C337	RCUV1E223MD	0.022 25
C338	ECUV1E473MD	0.047 25
C339	ECEA1CK101B	100 16
C340	RCUV1E103MD	0.01 25
C341	RCUV1H560KC	56P 50
C342	ECEA1CK100	10 16
C343	ECUV1E473MD	0.047 25
C344	ECEA1CK470B	47 16
C345	ECEA1HK010B	1 50
C346	ECEA1CK100B	10 16
C347	ECUV1E473MD	0.047 25
C348	ECEA1HK010B	1 50
C350	RCUV1H103ZF	0.01 50
C351	ECEA1CK100B	10 16
C352	ECEA1HK2R2B	2.2 50
C353	ECEA0JK470B	47 6.3
C354	ECEA1CK470B	47 16
C355	RCBS1C103NYY	0.01 16
C356	RCBS1C103NYY	0.01 16
C358	ECEA1AK330B	33 10
C359	ECEA1HK2R2B	2.2 50
C360	RCUV1H103ZF	0.01 50
C401	ECEA1AU221	220 10
C402	ECEA1HK010B	1 50
C403	ECEA1HK010B	1 50
C404	ECEA1HK010B	1 50
C405	ECEA1HK010B	1 50
C406	ECEA1ASS471	470 10
C407	ECEA1AU471	470 10
C408	ECUV1E104MD	0.1 25
C409	ECEA0JK220B	22 6.3
C410	RCUV1E473MD	0.047 25

Ref. No.	Part No.	Value.
C411	ECEA1AK220B	22 10
C412	RCUV1E473MD	0.047 25
C413	ECEA0JK220B	22 6.3
C414	ECEA1AU471	470 10
C415	ECUV1E104MD	0.1 25
C416	ECEA1CU221E	220 16
C417	ECQV1H104JZ	0.1 50
C418	ECQV1H104JZ	0.1 50
C419	ECEA1CV221SE	220 16
C420	ECEA0JU101B	100 6.3
C421	ECUV1E333MD	0.033 25
C422	RCUV1H102MD	0.001 50
C424	ECEA0JU101B	100 6.3
C425	ECQB1H103JZ3	0.01 50
C426	ECEA1HK010B	1 50
C427	ECEA1HK010B	1 50
C428	ECEA1HK010B	1 50
C429	ECEA1HK010B	1 50
C430	ECEA1AU471	470 10
C431	ECEA1CV221SE	220 16
C432	ECQV1H104JZ	0.1 50
C433	ECQV1H104JZ	0.1 50
C434	ECQB1H103JZ3	0.01 50
C435	ECEA1CV221SE	220 16
C436	ECEA0JU101B	100 6.3
C437	ECUV1E333MD	0.033 25
C438	RCUV1H102MD	0.001 50
C440	ECEA0JU101B	100 6.3
C441	ECEA1CSS222Z	2200 16
C443	ECUV1E104MD	0.1 25
C444	ECUV1E104MD	0.1 25
C445	ECUV1E683MD	0.068 25
C446	ECUV1E683MD	0.068 25
C447	ECUV1E683MD	0.068 25
C448	ECUV1E683MD	0.068 25
C450	ECUV1E104MD	0.1 25
C451	ECEA1EKN3R3B	3.3 25
C501	ECEA1CV221SE	220 16
C502	ECUV1H102ZF	0.001 50
C503	RCUV1H102ZF	0.001 50
C504	ECUV1H102ZF	0.001 50
C505	ECUV1H102ZF	0.001 50
C506	ECUV1H102ZF	0.001 50
C507	ECUV1H102ZF	0.001 50
C508	ECUV1H102ZF	0.001 50
C509	ECUV1H102ZF	0.001 50
C510	ECUV1H102ZF	0.001 50
C511	ECUV1H102ZF	0.001 50
C512	ECUV1H102ZF	0.001 50
C513	ECUV1H102ZF	0.001 50
C514	RCUV1H102ZF	0.001 50
C515	ECUV1H102ZF	0.001 50
C516	ECUV1H102ZF	0.001 50
C517	ECUV1H102ZF	0.001 50
C518	ECUV1H102ZF	0.001 50
C519	RCUV1H102ZF	0.001 50
C520	ECUV1H102ZF	0.001 50
C521	ECUV1H102ZF	0.001 50
C522	ECUV1H102ZF	0.001 50
C523	ECUV1H102ZF	0.001 50
C524	RCUV1H102ZF	0.001 50
C525	ECUV1H102ZF	0.001 50
C526	ECUV1H102ZF	0.001 50
C528	ECUV1H102ZF	0.001 50
C529	ECUV1H103MD	0.01 50
C530	ECEA1CV221SE	220 16
C601	ECEA1ASS471	470 10
C602	ECEA1CK100B	10 16
C603	ECEA1CK101B	100 16
C604	ECEA1ASS471	470 10
C605	RCUV1E103MD	0.01 25
C606	RCUV1E103MD	0.01 25
C607	RCUV1E103MD	0.01 25
C801	ECKD1H102MD	0.001 50

CABINET PARTS LIST (See illustrations on pages 20~22)

Ref. No.	Part No.	Description
CABINET AND CHASSIS		
1	RJE235ZB	CONNECTOR CORD ASS'Y
2	RUB525ZA	ARM
3	RUL1000ZA	BRACKET
4	RUL1042ZA	ANGLE
5	RUL1043ZA	ANGLE
6	RUQ97ZA	SPRING
7	RMX350ZA	INSULATOR
8	XYN3+F12	SCREW
9	XTB3+10J	SCREW
10	XTB3+6F	SCREW
11	XTB3+8J	SCREW
12	1KEA1500AZA	ANGLE
13	XTB3+12J	SCREW
14	RHE5183ZA	SCREW
15	RKM1070ZB	MAIN CASE ASS'Y
16	RKF917ZA	CABINET PLATE
17	RBN9004ZA-0	KNOB, VOL VOL-INT
18	RBN9005ZA-0	KNOB, TONE ETC.
19	RYPM1500AJHD	CASSETTE COVER ASS'Y
19-1	RUW128ZA	SPRING
19-2	RME458ZA	ANGLE
19-3	RDF3120ZA	SHAFT
19-4	XTV26+6JFZ	SCREW
19-5	RHG2129ZA	RUBBER
19-6	RYQM1500AJHD	HOLDER
20	RYMM1500AJHD	UPPER CABINET
20-1	RZEM1500AJHD	CHASSIS
20-2	RUQ80ZA	COIL SPRING
20-3	RDF3120ZA	SHAFT
20-4	RDF3125ZA	SHAFT
20-5	RDF3139ZA	SHAFT STOPPER
20-6	RDF3141ZA	SHAFT
20-7	XTB3+10J	SCREW
20-8	RHG2127ZA	RUBBER
20-9	RHG2128ZA	RUBBER
20-10	RHG2136ZA	RUBBER
20-11	RHG225Z	RUBBER
20-12	RHG5056ZA	RUBBER
20-13	RHE5161ZA	SCREW
20-14	RGL74ZA	LENS
20-15	RYEM1500AJHD	LENS
20-16	RBC1196ZA-0	BUTTON, FAST
20-17	RBC1197ZA-0	BUTTON, FAST
20-18	RBC1198ZA-0	BUTTON, TAPE/RADIO
20-19	RBC1199ZA-0	BUTTON, HEAD SET/SP
20-20	RBC1200ZA-0	BUTTON, BAND
20-21	RBC1201ZA-0	BUTTON, CH
20-22	RBC1203ZA-0	BUTTON, MEMORY
20-23	RBC1293ZA-0	BUTTON, AMBIENCE
20-24	RBC9121ZA-0	BUTTON, STOP/EJECT
20-25	RJP6G18ZA	PLUG (6P)
20-26	RUP2308ZAN	P.C.B
20-27	3JSA1500ZA	SOCKET ASS'Y
21	RJS4L10Z	SOCKET
22	RJS4L4Z	SOCKET (4P)
23	RJS8L10ZA-X	SOCKET
24	RJS8L4ZA-X	SOCKET
25	RJT807ZB-X	TERMINAL
26	RJT825Z	TERMINAL
27	2JSA-6	REED WIRE
28	2JSA-7	REED WIRE
29	2JSA-2	REED WIRE
30	2JSA-1	REED WIRE
31	RJP11G4YA	PLUG
32	RJP12G18ZA	PLUG(12P)
33	RJP2G17ZA	PLUG(2P)
34	RJP30A13ZA	PLUG(30P)
35	RJP4G18ZA	PLUG (4P)
36	RJS5L4Z	SOCKET
38	RJS163Z	SOCKET
39	RJS2L3Z	SOCKET(2P)
40	RJE200ZA	CORD
42	RJT707Z	TERMINAL
43	XTB3+6F	SCREW
44	RUB521ZA	ARM
45	RUL978ZB	ANGLE
46	RUD90ZB	SPRING
47	RJP2G9Y	PLUG(2P)
48	RJP5G18Z	PLUG(5P)
49	RJP6G18ZA	PLUG (6P)
50	RJP6G9YA	PLUG
51	RJP8G18Z	PLUG(8P)
52	RJP9G18ZA	PLUG(9P)
53	RJP9G27ZA	PLUG
54	RMC1153ZA	SHIELD COVER
55	XAMR001SA	NEON LAMP
56	XAMR011SA	NEON LAMP
58	RJP8G28ZA	PLUG
59	RJE248ZA	CONNECTOR CORD ASS'Y
60	RUL1001ZA	ANGLE
61	RMR122ZA	ANGLE
62	RMC1154ZA	SHIELD COVER
63	RMC1156ZA	SHIELD COVER
64	XTB3+6F	SCREW
65	XNS9D	NUT
66	RUB522ZA	SHAFT
67	RUL1047ZA	LEVER
68	RDF3122ZA	SHAFT
69	XUC15FY-V	E RING
70	XTB3+6FFZ	SCREW
71	RHE5190ZA	SCREW
72	XYN3+F15	SCREW
73	XTB3+8F	SCREW

■ MECHANISM PARTS LIST (See illustrations on pages 23, 24)

Ref. No.	Part No.	Description
MECHANISM		
CASSETTE DECK		
M1	RFU140ZA	MECHANISM CHASSIS
M2	RFM130ZA	MOTOR ASS'Y
M3	RFG114ZA	MAIN GEAR
M5	RFE440ZA	PLATE ASS'Y
M6	RFS761ZA	SPRING
M7	RFE441ZA	MAIN PLATE
M8	RFR50ZA	PINCH ROLLER ARM ASS'Y
M9	RFE442ZA	ANGLE
M10	RFE443ZA	LOCK PLATE ASS'Y
M11	RFS762ZA	LOCK SP
M12	RFE444ZA	ANGLE
M13	RFE445ZA	COIL SPRING
M14	RFQ54ZA	PULLEY
M15	RFS763ZA	SPRING
M16	RFE446ZA	SCREW
M17	RFP22ZA	COIL ASS'Y
M18	RFE447ZA	CORE
M19	RFX166ZA	PL BRACKET
M20	RFT21ZA	P.C.B W/S.W
M21	RFD339ZA	ANGLE
M22	RFD340ZA	SLIDE PLATE
M23	RFD341ZA	ANGLE
M24	RFS764ZA	SPRING
M25	RFY836ZA	PINCH ROLLER ARM ASS'Y
M26	RFD342ZA	PULL PLATE
M27	RFD343ZA	PLATE
M28	RFD344ZA	ANGLE
M29	RFQ55ZA	PULLEY
M30	RFD345ZA	HEAD PANEL ASS'Y
M31	RFE448ZA	TAPE GUIDE
M32	RFD346ZA	HEAD SP PLATE
M33	RJH4C56GZAA	HEAD
M34	RFD347ZA	ANGLE
M35	RFS765ZA	PINCH ROLLER SP
M36	RFS766ZA	SPRING
M37	RFF59ZA	FLYWHEEL ASS'Y
M39	RFB96ZA	MAIN BELT
M40	RFD348ZA	MG PLATE ASS'Y
M41	RFD349ZA	FG PLATE ASS'Y
M42	RFD350ZA	RG PLATE ASS'Y
M43	RFS767ZA	FR GEAR PLATE SP
M44	RFG115ZA	FF GEAR
M45	RFD351ZA	ED PLATE
M46	RFD352ZA	ED PLATE
M47	RFY837ZA	LEVER
M48	RFD353ZA	TG PLATE ASS'Y
M49	RFD354ZA	TG PLATE ASS'Y
M50	RFS768ZA	TG PLATE SPRING
M51	RFG116ZA	T GEAR
M52	RFG125ZA	FT-GEAR
M53	RFK22ZA	FR CLUTCH ASS'Y
M54	RFG118ZA	GEAR
M55	RFG119ZA	GEAR
M56	RFG120ZA	DT GEAR
M58	RFD355ZA	ES PLATE
M59	RFG121ZA	GEAR
M60	RFG122ZA	CAM GEAR
M62	RFS769ZA	SPRING
M63	RFY838ZA	LEVER
M64	RFS770ZA	ED SPRING
M65	RFX167ZA	SPACER
M66	RFJ81ZA	REEL TABLE
M67	RFX168ZA	SPACER
M68	RFG123ZA	GEAR
M70	RFD357ZA	KF BRACKET ASS'Y
M71	RFT22ZA	P.C.B W/S.W
M72	RFD358ZA	ANGLE
M73	RFS771ZA	SPRING
M74	RFS772ZA	SPRING
M75	RFG126ZA	CAM GEAR
M76	RFD359ZA	KF PLATE ASS'Y
M77	RFS773ZA	SPRING
M78	RFS774ZA	SPRING
M79	RFS775ZA	SHAFT
M80	RFD360ZA	TA PLATE
M82	RFD361ZA	SW BRACKET
M83	RFD362ZA	ANGLE
M84	RFS776ZA	SPRING
M85	RFS777ZA	SPRING
M86	RFS778ZA	SPRING
M87	RFY839ZA	LIFT UP LEVER
M88	RFD363ZA	FR BRACKET ASS'Y
M89	RFY847ZA	REW LEVER
M90	RFY841ZA	FF LEVER
M91	RFD364ZA	PC PLATE
M92	RFS779ZA	SPRING
M93	RFE449ZA	ANGLE
M94	RFD365ZA	PE PLATE ASS'Y
M95	RFS780ZA	SPRING
M96	RFS781ZA	SPRING
M97	RFE450ZA	BACK SLIDER
M98	RFD366ZA	CD PLATE
M99	RFS782ZA	SPRING
M100	RFE451ZA	CASSETTE CASE
M101	RFD372ZA	PLATE
M102	RFS783ZA	SPRING
M103	RFI51ZA	RUBBER SPACER
M104	RFX169ZA	SPACER
M106	RFI52ZA	FELT
M108	RFY849ZA	EJECT LEVER
M200	RFE468ZA	SCREW
M201	RFE452ZA	SCREW
M202	RFE453ZA	SCREW
M203	RFE454ZA	SCREW
M204	RFE455ZA	SCREW
M205	RFE456ZA	SCREW
M206	RFE457ZA	SCREW
M208	RFE458ZA	SCREW
M209	RFE459ZA	SCREW
M210	RFE460ZA	SCREW
M211	RFE91Z	SCREW
M212	RFN201ZA	WASHER
M213	RFE461ZA	SCREW
M214	RFN191ZA	WASHER
M215	RFN192ZA	WASHER
M216	RFN193ZA	WASHER
M217	RFN194ZA	WASHER
M218	RFN195ZA	WASHER
M219	RFN196ZA	WASHER
M220	RFE469ZA	SCREW
M221	RFN197ZA	WASHER
M222	RFN198ZA	WASHER
M223	RFN199ZA	WASHER
M224	RFN200ZA	WASHER
M226	RFE463ZA	E RING
M227	RFE464ZA	E RING
M228	RFE465ZA	E RING
M229	RFE466ZA	E RING
M230	RFE467ZA	E RING
M231	RUA9040ZA	CHASSIS
M232	RUB518ZA	ARM
M233	RUB519ZA	ARM
M234	RUB520ZA	ARM
M235	RUB9028ZA	LEVER
M236	RUD88ZA	COIL SPRING
M237	RUD89ZA	COIL SPRING
M238	XTB3+6F	SCREW
M240	RHR1354ZA	HOLDER
M246	RHE5160ZA	SCREW
M247	RHG9009ZA	RUBBER SPACER
M249	XNG4B	NUT
M250	XWA4B	WASHER
M251	RJP8G28ZA	PLUG

ELECTRICAL PARTS LIST

Ref. No.	Part No.	Description
INTEGRATED CIRCUITS		
IC1	LA1175	I.C. FM FRONT END
IC2	RVILA1140	I.C. FM IF & DET
IC3	STK3400A	I.C. FM NOISE BRANKER
IC4	RVIBA6133	I.C. AMBIENCE
IC5	LA1135	I.C. AM TUNER
IC6	HA12429	I.C. AM NOISE BRANKER
IC7	RVIUPC1228H	I.C. TAPE EQ AMP
IC9	UPD1714GA929	I.C. PLL & CONT
IC301	MN4066B	I.C. SIGNAL SELECTOR
IC302	RVIUPC1228H	I.C. TAPE EQ AMP
IC303	RVITC4528BP	I.C. FLIP FLOP
IC304	M51203TL	I.C. MUTE CONT
IC401	RVITA7230P	I.C. POWER AMP
IC402	TA7295P	I.C. POWER AMP
IC403	TA7295P	I.C. POWER AMP
IC601	RVITC4011BP	I.C. NAND GATE
TRANSISTORS		
Q1	3SK74L	TRANSISTOR.
Q3	2SD601R	TRANSISTOR
Q4	2SD601R	TRANSISTOR
Q5	2SD601R	TRANSISTOR
Q6	2SD601R	TRANSISTOR
Q7	2SD601R	TRANSISTOR
Q8	2SD601R	TRANSISTOR
Q9	UN2214TW	TRANSISTOR
Q10	2SK160K4TW	TRANSISTOR
Q11	2SK184GR	TRANSISTOR
Q12	2SK184GR	TRANSISTOR
Q13	2SD601R	TRANSISTOR
Q14	2SD601R	TRANSISTOR
Q15	2SD601R	TRANSISTOR
Q16	2SD601R	TRANSISTOR
Q17	2SD601R	TRANSISTOR
Q18	2SC2295B	TRANSISTOR
Q19	2SC2497R	TRANSISTOR
Q22	2SD601R	TRANSISTOR
Q23	2SD601R	TRANSISTOR
Q25	2SD601R	TRANSISTOR
Q27	2SD601R	TRANSISTOR
Q28	2SD596DV2TW	TRANSISTOR
Q29	UN2124TW	TRANSISTOR
Q30	2SC1384	TRANSISTOR.
Q31	2SD601R	TRANSISTOR
Q32	2SC1384	TRANSISTOR.
Q33	2SA684R	TRANSISTOR
Q34	2SD601R	TRANSISTOR
Q35	2SC1384	TRANSISTOR.
Q36	2SK160K4TW	TRANSISTOR
Q37	2SD601R	TRANSISTOR
Q38	2SB709RTW	TRANSISTOR
Q39	2SB709RTW	TRANSISTOR
Q40	2SB709RTW	TRANSISTOR
Q41	2SD601STW	TRANSISTOR
Q47	RVTFMG5TX	TRANSISTOR
Q48	RVTFMG5TX	TRANSISTOR
Q49	2SD601R	TRANSISTOR
Q50	2SD601R	TRANSISTOR
Q51	2SC2404CTW	TRANSISTOR
Q301	2SC1622D17TW	TRANSISTOR
Q302	2SD601RTX	TRANSISTOR
Q303	2SD601R	TRANSISTOR
Q304	2SD601R	TRANSISTOR
Q305	2SC1622D17TW	TRANSISTOR
Q306	2SD601RTX	TRANSISTOR
Q307	2SD601RTX	TRANSISTOR
Q308	2SK332D	TRANSISTOR.
Q309	2SD601RTX	TRANSISTOR
Q310	2SD601RTX	TRANSISTOR
Q311	2SD601R	TRANSISTOR

Ref. No.	Part No.	Description
Q314	UN2214TW	TRANSISTOR
Q315	UB2214TX	TRANSISTOR
Q401	2SC1622D17TW	TRANSISTOR
Q402	2SC1622D17TW	TRANSISTOR
Q403	2SD601R	TRANSISTOR
Q404	2SD601R	TRANSISTOR
Q405	2SD601R	TRANSISTOR
Q406	2SD601R	TRANSISTOR
Q407	2SB709ARTW	TRANSISTOR
Q408	2SD601R	TRANSISTOR
Q409	2SD601R	TRANSISTOR
Q410	2SB1144S	TRANSISTOR
Q601	2SA1096R	TRANSISTOR
Q602	2SD601RTX	TRANSISTOR
Q603	2SC2497R	TRANSISTOR
DIODES		
D1	RVD1SV103	DIODE
D2	1SV99	DIODE
D3	1SV99	DIODE
D4	RVD1SV103	DIODE
D5	RVD1SV103	DIODE
D6	RVD1SV103	DIODE
D7	RVDKB265G	DIODE
D8	RVDKB265G	DIODE
D9	MA165	DIODE
D12	MA151WKTW	DIODE
D13	RVDKV1235Z2	DIODE
D14	MA153TW	DIODE
D17	SM-1A-12	DIODE
D19	MA151WATW	DIODE
D20	MA4120MTA	DIODE
D21	MA4110MTA	DIODE
D22	MA151WATW	DIODE
D23	MA4062M	DIODE
D24	MA151WKTW	DIODE
D25	MA4056M	DIODE
D26	MA165	DIODE
D27	MA165	DIODE
D29	MA165	DIODE
D30	MA165	DIODE
D31	MA165	DIODE
D32	MA4047MTA	DIODE
D33	MA165	DIODE
D34	MA151WKTW	DIODE
D301	MA165	DIODE
D302	MA165	DIODE
D303	MA4051M	DIODE
D304	MA153	DIODE
D305	MA153	DIODE
D306	MA4062M	DIODE
D308	MA151WATW	DIODE
D309	MA151WK	DIODE
D310	MA165	DIODE
D312	MA4100M	DIODE
D313	MA151WATW	DIODE
D314	MA152K	DIODE
D405	MA151WKTW	DIODE
D501	RVDDSB15TC	DIODE
D601	SM-1A-12	DIODE
D602	MA4110MTA	DIODE
D603	MA165	DIODE
D604	SM-1A-12	DIODE
VARIABLE RESISTORS		
VR1	EVND4AA00B14	V.R. FM SEPARATION
VR301	EVKQ0B014B15	V.R. VOLUME
VR302	EVK9QA014C23	V.R. AUTO VOLUME
VR303	EVK9QA014GA5	V.R. TONE
VR304	EVND1AA00B53	V.R. AVC GAIN
VR305	EVK7QB014B24	V.R. INTER COM MIC
VR306	EVK4QA014B24	V.R. MUTE LEVEL

Ref. No.	Part No.	Description
VARIABLE CAPACITORS		
CT1	RCVTZ20F	TRIMMER
CT2	RCVTZ20F	TRIMMER
CT3	RCVTZ20F	TRIMMER
CT4	RCVTZ20F	TRIMMER
THERMISTORS AND VARISTORS		
TH301	RRT103	THERMISTOR
COILS AND TRANSFOMERS		
L1	RLA4N19A-0	COIL
L2	RLQZP150KT-Y	COIL
L4	RLA4N20A-0	COIL
L5	RLA4N21A-0	COIL
L6	RL04N235A-0	COIL
L8	RLQZP4R7KT-Y	COIL
L501	RLT6G7A-I	CH TRANSFORMER
L601	RLT6D1A	COIL
T1	RLI4A40-Z	COIL
T2	RLI4A24	I.F.TRANSFORMER
T3	RL02A26-T	COIL
T4	RLA2A6-T	COIL
T5	RLA2A7-T	COIL
T6	RLI2A29	I.F.TRANSFORMER
T7	RLI2A30	I.F.TRANSFORMER
T8	RLI2A16	I.F.TRANSFORMER
T9	RLI4A41-T	FREQUENCY TRANSFORMER
FILTERS		
CF1	RVF107WAZ	CERAMIC FILTER
CF2	RVF107WAZ	CERAMIC FILTER
CF3	NCRZ450C4N7W	COMBINATION PART
CF4	RVFCFMS450B	CERAMIC FILTER
LAMPS		
NE1	XANR13T33	NEON LAMP
SWITCHES		
S201	RFT21ZA	P.C.B W/S.W. FWD/REV
S202	RFT22ZA	P.C.B W/S.W. FWD/REV
S204	RFA84ZA	SW. MUTE
OTHERS		
X1	RVBCSB456F15	CERAMIC FILTER
X2	RVCE4500NZN	CRYSTAL OSCILLATOR

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